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ABSTRACT

The document describes a study which investigated the social adjustment of orthopedically handicapped (OH), mainstreamed, high school students by comparing their status with that of their nonOH classmates on several socioaffective measures. An introduction reviews literature on the assumptions underlying mainstreaming and research on the academic and social effects of mainstreaming for handicapped children. Methodology is the topic of another section which outlines the assessment instruments used, including self report measures, the Peer Rating Scale, student folder data, participant observer questionnaires, a parent questionnaire, and a retrospective questionnaire. Noted among findings are that OH youngsters received significantly more positive ratings than their nonOH classmates, OH students feel a greater sense of involvement in their classroom activities, and OH students have lower self esteem with regard to their peers. Included are tables with statistical data and sample copies of scales and questionnaires. (SB)

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A MULTIDIMENSIONAL COMPARISON OF THE SOCIAL ADJUSTMENT OF MAINSTREAMED PHYSICALLY HANDICAPPED HIGH SCHOOL STUDENTS AND NON-HANDICAPPED CLASSMATES

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Westside Community for Independent Living

Los Angeles, California

July, 1981

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Foreword

The following report was funded by the California State Department of Education for the period of December 15th, 1980, through June 15th, 1981. The authors gratefully acknowledge this support and assume sole responsibility for the findings and conclusions reported herein; these do not imply endorsement by either the California State Department of Education or the Westside Community for Independent Living.

We would like to thank a number of people whose competence and reliability made this study possible. Foremost among these are Alan E. Cummings, Heike I. Mahler, and Linda A. Tonsing, for their work in the data preparation, computer programming and data collection, respectively. We would also like to give a special thanks to our very able typist/frequent editor, Beth Stiles, for her utterly dependable good cheer and productivity.

Our thanks also go out to the numerous administrators, teachers and staff at El Rancho and Bassett High School for their support and cooperativeness throughout our lengthy, always somewhat inconvenient data collection process.

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Graduates of Mainstreamed classrooms had generally positive recollections of these experiences. The one item which blemished this generally positive recall dealt with peer rejection from their non-disabled classmates. Our group, on the whole, was divided on that question. It seems fair to conclude that at least some of the respondents in our Retrospective sample had experienced social rejection from their peers without disabilities. The composite image that emerges from the combination of data is a consistent one; high school OH youngsters in Mainstreamed classrooms are successful students (as most of our data taken from their Academic Folders suggests), who feel somewhat more involved in their classroom activities than their Non-OH peers. Although, on the whole, their reported self-esteem does not differ from that of their peers, there is a good possibility that they experience some feelings of inadequacy with regard to their peers.

The root of this discomfort may have a basis in reality; peers gave OH students significantly higher sociometric ratings on a number of dimensions, but significantly lower social acceptance scores. Apparently, peers can express positive attitudes toward OH students, but their attitudes leave them short of actually inviting OH youngsters to become part of their group activities. A somewhat insecure sense of peer-related self-esteem becomes understandable in concert with the mixed, ambivalent feelings OH students receive from their peers.

The above social scenario, apparently, is one teachers are unaware of. Although they were strongly in favor of Mainstreaming (with a slight qualification; that enough training and special services are not available), they basically perceived no differences in the social interactions of OH students and their OH peers. Perhaps they are lulled into a sense of serenity by the OH students' generally greater involvement, better class performance, and rules-abiding profile. However, as the data from the sociometric and the Retrospective Questionnaire suggests, social rejection by their peers is something OH youngsters feel acutely; and it

is something which has a notable effect on their feelings of self worth.

Results from this study would appear to be of special interest to educators involved with the Mainstreaming of youngsters with physical handicaps. Our data suggests that the intended social benefits of Mainstreaming may well not be taking place; acceptance of OH youngsters was not found. Instead, peers seem to be expressing "defensively" positive attitudes which mask an underlying predisposition to keep social distance. Tranquil, academically competent social behavior on the part of OH students may be leading teachers to suspect that everything is "fine" socially. Our sense of the situation, however, leads us to recommend further studies aiming to replicate our findings. The strongly ethnic quality of our population may have influenced findings in an unknown way. It seems fair to conclude, however, that efforts to help Mainstreaming programs run more smoothly may benefit from focusing on the attitudes of teachers and students <u>without</u> disabilities.

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GLOSSARY OF ACRONYMS

OH - Orthopedically Handicapped students

MS - Mainstreaming

PRS - Peer Rating Scale

SEI - Self Esteem Inventory

CES - Classroom Environment Scale

Non-OH - Non-Orthopedically Handicapped students

PHRC - Physically Handicapped in the Regular Class. Program at Bassett High School for students capable of taking at least half of their classes in the regular program.

WCIL - Westside Community for Independent Living

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INTRODUCTION

Preface

The following section reviews the research literature most pertinent to our investigation on the social adjustment of orthopedically handicapped youngsters "mainstreamed" in High School.[1] Our bibliographic survey was helped immeasurably by the computerized retrieval services of ERIC (Educational Resources Information Center), ECER (Exceptional Child Education Resources), the UCLA Biomedical Library, and the National Clearinghouse for Mental Health Information (NIMH).

Our literature review starts with a consideration of the assumptions underlying Mainstreaming as an educational policy for the handicapped, arguing that its development has been guided by philosophical, political and legal rationales, with empirical investigations into its efficacy lagging behind. We then go on to a brief survey of those studies on the academic and social effects of Mainstreaming for children with handicaps, concluding that the current data-base on these issues is basically inconclusive, but that certain trends are becoming apparent, nonetheless. Next, we offer our perceptions of two needed "next-steps" in Mainstreaming research:

1. A more specific focus on type of disability and age range (orthopedically handicapped, high schoolers in our study), and
2. A multidimensional approach to understanding Mainstreaming which synthesizes the views of the handicapped, peers, involved participants and academic/achievement data.

In this latter regard, we cite a number of earlier indications that the

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[1] The authors much prefer the phrase "children with handicaps" to the more commonly used "handicapped children" because the latter tends to connote a problem with the entire child. We feel our preferred phrase is more accurate and less stigmatizing. Moreover, we use the word "handicap" because of PL 94-142; we ultimately prefer "disabilities".

attitudes of teachers and other educators are important influences on the outcome of Mainstreaming practices.

A. Advent of Mainstreaming

Since the enactment of Public Law 94-142 (the Education for All Handicapped Children Act of 1975), the concept and practice of "Mainstreaming" has been championed as highly desirable educational policy for students who are variously disabled (Zigler & Muenchow, 1979). Although the intended benefits of Mainstreaming can summon agreement among educators (Ashley, 1977), the rationale and impetus for such programming has been based more on faith and values (however laudable) than on empirical demonstrations of benefits for those involved (Jones, Gottlieb, Guskin, & Yoshida, 1978). Indeed, there is fairly compelling evidence suggesting that mainstreamed retarded children do not differ in academic performance from comparable youngsters placed in special education classes (Budoff & Gottlieb, 1976). Moreover, there is currently a lack of support for the expectation that the socio-emotional functioning of children with handicaps will be enhanced by a mainstreaming experience (Kaufman, Gottlieb, Agard, & Kucic, 1975).

The roots of the Mainstreaming movement date back to the social activism of the 60's. In particular, the notion drew its life-blood from the nation's concern with civil rights and discrimination against minority group children, who made up the preponderance of those labeled retarded and enrolled in special education classes. Mainstreaming, then, was seen as a humanitarian innovation that would discontinue what critics contended was the inherently "stigmatizing" nature of special-class placement, and offer a much preferred educational and social alternative (echoing similar arguments evoked in favor of special education programming a decade earlier (Quay, 1963)). "Leap-frogging" over the

merits of a firm grounding in empirical demonstrations of its virtues, Mainstreaming has since become more like a torrent in practice, than an educational trend (Ross, 1978).

The assumptions underlying the Mainstreaming movement refer mainly to the intended benefits for the student with a handicap. Linton and Juul (1980) maintain that the regular classroom is less isolating for the child with a handicap and will, therefore, benefit the child both academically and socially. They also point out that regular students are expected to ultimately understand and accept the handicapped, with teachers being the social fulcrum for such a process. Although the above has not been borne out by empirical scrutiny (Thurman & Fiorelli, 1979), mainstreaming has grown to become orthodox practice in the schools on the impetus from three major sources: the influence of professional educatiors, the trend-setting decisions of the courts and state governmental policies (Kaufman, et al., 1975).

It has been noted that the brief history of Mainstreaming bears some unfortunate parallels to that of other major changes in this nation's educational policies. Proceeding almost exclusively on good intentions based on humanitarian principles, education for the mentally and physically handicapped in the last two decades has swung from "warehousing" in state institutions, to "habilitation" in special-education classes, to "normalization" in mainstreamed classrooms. The point is <u>not</u> that advancements have not been realized. Rather, as stated elsewhere (Zigler & Muenchow, 1979), social policy based on such grounds is quite vulnerable to extreme pendulum swings; often discarding sound ideas before they receive a sober appraisal in practice.

Until mainstreaming is more firmly rooted in empirical demonstrations of its efficacy with given youngsters in particular settings, it is subject to

becoming an indiscriminate practice of placing children with handicaps in already beleaguered classrooms.

B. Effects of Mainstreaming on the Academic and Social Adjustment of Children With Handicaps.

The available data simply make it unwarranted to make conclusive statements about the virtues of mainstreaming youngsters with handicaps with their non-handicapped peers. While some investigators have found improved academic performance in Mainstreamed settings for children with handicaps (Walker, 1974), at least at offsetting balance of data suggest that they do not differ in academic performance from comparable youngsters placed in special-education classes (Budoff & Gottlieb, 1976). Unproven as an educational panacea, must of the remaining zeal for the practice as a blanket policy may stem from its anticipated effect in the socio-emotional domain. These include removal of the stigma associated with special-education classes, enhancement of the peer status of youngsters with handicaps with their non-handicapped peers, promotion of learning through the modeling of appropriate behavior by non-handicapped peers, as well as providing a more "real life" environment for learning (having greater competition and demand for social skills (Kaufman, et al., 1975). Regrettably, as mentioned, the above type of benefits have not been found in most investigations into the effects of mainstreaming (Meyers, McMillan, & Yoshida, 1980). Indeed, the weight of available evidence strongly suggests the possibility of some deleterious effects of Mainstreaming or a number of important peer-related dimensions.

Thurman & Lewis (1979) point out that prejudice toward the handicapped may have its roots in children's tendency to note and denigrate "differences" in others; evident as early as in preschool, long before the effects of segregation and labels come into play. In the same article, they review a number of studies documenting the rejection of preschool children with handicaps by their non-

handicapped peers in an integrated setting (e.g., Cooke, Apolloni, & Cocke, 1977).

A similarly discouraging observation is made by Semmel & Cheney (1979) in their review of studies looking at the peer acceptance of mainstreamed, EMR children. They conclude:

> "It is evident from the research literature that mildly handicapped pupils were rejected by their normal peers prior to the advent of Mainstreaming and that there is every indication that this social rejection continues to be a serious impediment to their growth". p.68

An example of a study contributing to the above scenario is reported by Parish, Ohlsen, & Parish (1978). They found a group of grade school children chose significantly more positive attributes to describe non-handicapped peers than those they used to describe groups of orothopedically handicapped, learning disabled and emotionally disturbed age-mates. However, the research literature has revealed a number of complexities in this sociometric issue.

Bruininks, Rynders, & Gross (1974) found mildly retarded elementary graders in suburban schools received significantly lower sociometric ratings than their same-sex, non-retarded classmates in regular classrooms. Interestingly, they did not find these differences when combining the ratings of same and opposite-sex classmates, or in an urban sample.

Similarly, Bruininks (1978) later found lower peer-acceptance for learning disabled children in mainstreamed, elementary classrooms. Moreover, these children were less able to perceive their own socio-metric status than classmates.

In an excellent probe into the reasons for the inferior socio-metric status of EMR children in regular classrooms, Gottlieb, Semmel, & Veldman (1978) first assert that there is abundant empirical evidence on the inferior social status of EMR children with their peer group, regardless of type of class placement, using an earlier review of the literature as their anchoring reference (Gottlieb, 1975).

Furthermore, their results indicated that perceived academic incompetence was related to level of social acceptance, while perceived misbehavior was associated with their social rejection by peers.

Thus, the above studies suggest that while, on the whole, there is ample evidence of peer rejection of youngsters with handicaps by their non-handicapped, mainstreamed classmates, the sociometric phenomena in these classrooms are far from uni-dimensional. Aside from the qualifications posed by sex of rater, type of disability presented by the handicapped group and the operational definition of the socio-metric criterion, a number of ecolcgical considerations need to be made in understanding the social climate in mainstreamed classrooms. For example, a number of environmental factors may serve to minimize the possible deleterious effects of indiscriminate mainstreaming. Barclay & Kehle (1979) report some considerable success with a system for selecting those youngsters with handicaps most likely to benefit from a Mainstreaming experience. Drawing on their vast experience in measuring the ecology of the classroom setting, they are able to make predictive judgments on the ecological "fit" between potential mainstreamers and their intended classroom settings.

Thus, it appears that research on the social effects of mainstreaming has matured beyond inquiries into the fundamental question: "Is it better than special-ed placement for children with handicaps?" There appears to exist a more current need to explore the status of children with specific disabilities at given age ranges. Gottlieb, et al's, (1978) heuristically valuable distinction between social acceptance and rejection also merits continued application toward an understanding of the demonstrated inferior status of youngsters with particular physical and mental disabilities. Bruininks, et al's (1974) provocative findings of differential social status for elementary graders according to sex of rater and

geographic location also warrant further empirical investigation.

C. Attitudes of Educators Toward Mainstreaming

Research on the attitude of educators toward the practice of mainstreaming has similarly moved from global "stabs" at the "Is it better?" question, to more specific considerations of the parameters, correlates and consequences of such attitudes (Baker & Gottlieb, 1980). The bulk of the empirical data available, nonetheless, has focused on general aspects of teachers' positive or negative attitudes.

One of the earliest, most often cited studies in this line of research is Gickling & Theobald's (1975) questionnaire survey of teachers and administrators about to undertake mainstreaming for the first time. In response to a question asking the type of special-ed services they preferred, 86% said they favored regular class placement along with resource room assistance for mildly handicapped children. Along with this, however, 50% of the responding regular education personnel indicated that they strongly endorsed the use of self-contained classes for some of these children. Obviously, the respondents in this study did not favor either placement (mainstreaming vs. special-ed) totally.

Alexander and Strain (1978) concluded from their review of the literature on educators' attitudes toward the handicapped and mainstreaming that opinionnaire data strongly suggest an unfavorable attitude on their part. They felt this may be attributed, in part, to the fact that mainstreaming is usually imposed by fiat upon teachers who have had little or no preparation in handling the special needs of children with handicaps. These findings are corroborated in an independent investigation by Moore & Fine (1978). They found regular class teachers less accepting than special education teachers of Mainstreaming retarded and learning-disabled children.

The impact of teacher attitudes on their teaching practices and, more distally,

on student behavior has received empirical attention only recently. While some teachers can claim that their unfavorable attitudes toward mainstreaming do not influence their class situation and instruction in a negative way (MacMillan, Meyers & Yoshida, 1978), it is widely held that, in fact, these attitudes can have a profound effect on the social status, academic performance and self-evaluation of handicapped children in regular classrooms (Baker & Gottlieb, 1980; Gottlieb, et al., 1978; Brophy & Good, 1974). Little doubt remains that their perspective is an important contributor to the understanding of the social climate in the mainstreamed classroom.

D. Need for Multidimensionality and Specificity in Research Focus

As the multiplicity of factors known to influence the outcome of mainstreaming for handicapped youngsters becomes better known, researchers have begun calling for investigations which tap these various relevant data sources. Jones, et al., (1978) advise us:

> "If the true impact of mainstreaming is to be known, information will be needed from a variety of sources. Among more obvious data needs are those on student achievement and on attitudes of administrators, teachers, parents and pupils."

They go on to mention that achievement and adjustment information ought to be gathered on regular education students, as well, since some concern has been raised that mainstreaming may impact negatively upon them.

Similarly, Zigler and Muenchow's (1979) authoritative treatise on the "state of the art" research on mainstreaming calls for investigations into not only which children with which handicaps can benefit from this practice, but also states the need for efforts at identifying the: "environmental nutrients that promote full development."

Barclay & Kehle (1979) catalyze this line of thinking further in their influential comments on assessing child behavior in the classroom. These authors

contend that in order to understand a child adequately, (including one who is handicapped and mainstreamed) one must gather and merge inputs from self-reports, peers, and teachers as well as the most customary achievement data.

The notion of, in effect, making the classroom setting itself the basic unit of measurement for understanding the impact of mainstreaming, bears a strong conceptual kinship to earlier work in the field of community psychology (Moos, 1973); Baker, 1968). That sub-discipline of clinical psychology has forged a technology for relating characteristics of the environment to indices of human behavior. Some of that methodology and instrumentation may have direct applicability in Mainstreaming research.

E. The Orthopedically Handicapped in the Mainstream

In the authors' observations, no important studies on the orthopedically handicapped, mainstreamed child have taken place in the years ensuing Volpe's (1976) assertion that scant empirical attention has been paid to this group. What prior evidence there is suggests strongly that orthopedic disability often involves low social status and restricted social interactions.

Richardson (1970) summarized prior studies on the values people hold toward the physically handicapped. He found that there is: (a) a widespread preference for the non-handicapped over the handicapped, (b) these attitudes hold constant across widely differing social and geographical settings, and (c) children with certain disabilities are consistently preferred and other preferred less. These empirical findings, thus, corroborated Barker's (1953) earlier theoretical notion that those who are different physically from the majority of those around them tend to have the social status of minority group members and are subject to the same set of unfavorable attitudes. Illustratively, Billings' (1963) study with elementary graders showed unfavorable attitudes on their part toward crippled

children; considering them "inferior". Her other major, rather chilling, finding was that their older children expressed more unfavorable attitudes than the younger ones.

As mentioned, our literature search showed no other, more recent attempts to assess the social status of Mainstreamed, orthopedically handicapped youngsters; echoing Volpe's (1976) earlier observation. Given the very sizable number of such youngsters currently estimated to be enrolled in our schools (over 23 thousand in California alone), this appears to be an egregious and insensitive oversight.

The current study responds to our assessment of needed "next steps" in mainstreaming research. One basic direction called for is the focus on specific populations at specific age ranges. Thus, we restrict our inquiry to the social status of a high school aged, mainstreamed, orthopedically handicapped group (a focus that we find has not been taken previously by researchers). A second aspect of our study deriving from our examination of prior work, is taking a multidimensional approach to understanding the adjustment of these students in a mainstreamed classroom. Thus, we combine self-report data with peer ratings, teacher and parent observations, plus the observations of orthopedically handicapped graduates of mainstreamed classrooms.

METHODS

VIII.

A. Study Approach

This study aimed at obtaining a multi-faceted picture of the social adjustment of mainstreamed orthopedically handicapped (OH) students in regular high school classes. Several populations were thus involved (OH students, their non-OH classmates, regular and special class teachers, parents, and OH graduates of Mainstreamed programs), and several types of instruments were employed.

Because of the low number of OH students found in most mainstreamed classrooms, our investigations took us into 22 classrooms in two demographically comparable high schools. From the programs of the OH students, regular classes were selected as target mainstreamed classrooms. Each of these classes contained at least one OH student and were selected so that all OH Ss would be represented at least once while minimizing the total number of class intrusions. There were 16 such classes surveyed at Bassett and 6 at El Rancho High School. They represent a cross section of academic, remedial academic, elective and vocational classes.

B. Study Sites

The two regular high schools chosen as sites for this study were Bassett High School in La Puente, California, and El Rancho High School in Pico Rivera, California. These were selected from a list of high schools in Los Angeles County which operate regional programs for OH students and also mainstream at least some of these students into regular classes. Of the several schools we contacted which met these criteria, only the aforementioned two were willing to allow project staff to conduct all aspects of the study on their campuses.

1. Bassett High School. Bassett High School is a four-year (grades 9-12) high school of the Bassett Unified School District, located in a lower-middle income residential area in the San Gabriel Valley. Its enrollment (1980-81) of

1557 was made up of 71.4% Hispanic students, 20.7% white, 5.2% black, and 2.7% Asian, American Indian and other students combined. During the time of our study, these figures also included 52 OH students, most of whom were bussed in from 12 surrounding school districts in the San Gabriel Valley area.

The OH Department at Bassett High School operates three levels of programs for these students: (1) a physically handicapped in the regular class (PHRC) program for students capable of taking at least half of their classes in the regular program (N=15), (2) an OH special day class program for students who require special classes for more than half of their school day (N=19), and (3) a multi-handicapped (OMH) program for students with severe learning deficits in addition to their physical handicaps (N=18).

2. El Rancho High School. El Rancho High is a 3-year (grades 10-12) school in the El Rancho Unified School District located near the city of Whittier. Its 1980-81 student enrollment was 2142. Like Bassett, it is located in a lower-middle income suburb with a predominantly Hispanic population (85%). Other ethnic groups are represented as follows: approximately 10% white and 5% Asian with less than 1% black or other.

The OH program at El Rancho is considerably smaller than the one at Bassett High, with a total of 11 OH students. It is also a regional program; students come from six districts in the Whittier Area Cooperative for Special Education Program (WACSEP). Three of the eleven OH students at El Rancho remain in special classes all day at the school, while the other eight are mainstreamed for all or part of the day. The distribution of subjects by sex and grade varied with each instrument and is detailed later in this report.

C. Subjects.

1. OH Students. For this study the term "Orthopedically Handicapped (OH) Students" refers to those students affiliated with a school OH program. These

students have all been identified as having a physical impairment, (e.g., spina bifida or other paralysis, cerebral palsy, muscular dystrophy, rheumatoid arthritis, etc.) and/or a health impairment (e.g., epileptic seizures) which requires one or more special designated instructional or related services.

For this study, subjects consisted of all OH students in the two school sites who had been programmed into at least one regular (non-special education) class, with the exception of two students who were non-English speaking. Twenty-five Bassett students and eight El Rancho students met these criteria for a total of 33 OH subjects.[2]

2. Non-OH Students. These subjects were defined as all those students not identified as OH, who attended the 22 target mainstreamed classes. Of this very large number of students (approximately 500), nearly 350 of them participated in one or another portion of the study.

3. Teachers. Teachers invited to participate in our study included all OH special day class and OH resource teachers (N=5), plus all regular class teachers at both schools who had an OH student in at least one of their regular classes during the 1980-81 school year. (Bassett High, N=28; El Rancho High, N=12; total, n=40). Of these, 34 returned completed questionnaires used in the final data analyses.

4. Parents. Those invited to participate in this study included the parents of all OH students, plus a randomly selected number of parents of the non-OH students. Thirty-four parents participated in all, out of 150 who were sent invitations to fill out our questionnaire.

5. OH Graduates. These subjects included former students who had been enrolled in Orthopedically Handicapped mainstreaming programs during high school (N=20).

[2]Of the 25 Bassett High OH students, 14 were in the PHRC program, 10 in the special day class program, and 1 was enrolled in the multi-handicapped program. Thus, the majority of OH students in this study were mainstreamed in at least half their classes. Nearly all OH students were mainstreamed in at least 2 of their classes.

D. Assessment Instruments.

As a multi-dimensional study, several types of instruments were used in order to obtain the most comprehensive information.

1. Self Report Measures. In all target classes, students were given the Peer Rating Scale (PRS), a class-administered sociometric measure described below. In addition, half the target classes received the Classroom Environment Scale (CES), while the other half received the Self-Esteem Inventory (SEI). The CES and SEI are also described below. These measures were first piloted by project staff in a 9th grade, non-mainstreamed class. Then, actual data collection took place over a six week period, carried out by project staff members during a class period convenient to each teacher involved. Questions from the measures were read aloud to students in an attempt to minimize the effects of reading ability on scores.

a. Classroom Environment Scale (CES): (Trickett & Moos, 1973)

The CES assesses the social climates of junior high and high school classrooms. It focuses on the measurement and description of both teacher-student and student-student relationships.

The full version of the scale consists of 90 items clustering evenly into 9 dimensions of class atmosphere. For the purposes of this study, we selected those subscales which relate most closely to our central areas of concern: interpersonal relationships within the class. Thus, we used a 30-item, streamlined version of the CES yielding scores for each respondent on the following dimensions:

i. Involvement: 10 items measuring the extent to which students have attentive interest in class activities and participate in discussions. The extent to which students do additional work on their

own and enjoy the class is also considered (e.g., students put a lot of energy into what they do here, students are often "clock-watching" in this class). Items are answered "True" or "False", with scores ranging from 0 - 10 on each factor.

ii. Affiliation: 10 items assessing the level of friendship students feel for each other: i.e., the extent to which they help each other with homework, get to know each other easily, and enjoy working together (e.g., A lot of friendships have been made in this class, some students in this class don't like each other).

iii. Teacher Support: 10 items measuring the amount of help, concern, and friendship the teacher directs towards the students: i.e., the extent to which the teacher talks openly with students, trusts them, and is interested in their ideas is considered (e.g., The teacher takes a personal interest in students, this teacher "talks down" to students).

iv: Total: Sums the three scores above and represents a global idea of the affective climate each youngster feels in his/her surveyed classroom.

A copy of the CES along with a detailing of the items making up the above factors (i.e., factor structure) are included in Appendix A.

Data analyses with the CES included 19 OH students and 190 of their randomly selected non-OH classmates, matched on grade level and sex.[3]

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Insert Figure 1 about here

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b. Self Esteem Inventory (SEI): (Coopersmith, 1967)

The SEI is an often-used self-report measure of a child's regard toward himself/herself. The scale has been used with adequate

[3]The purpose of all the matching analyses was to see if there was any relationship between grade level, sex and membership in either the OH or Non-OH groups. No such relationships of significance were found in any of our samples, allowing us to assume differences on the criterion measures were not being affected by a hidden difference between the groups on grade level or sex.

validity and reliability findings in studies using elementary through high school populations. Although Coopersmith (1967) himself does not provide a factor structure for the SEI, we have categorized its (to us) 45 most relevant, non-redundant items into the following dimensions of self regard:

i. General aspects of self-esteem: Fourteen items tapping global or overall estimates of how one feels about one-self (e.g., I can't be depended on; I'm easy to like).

ii. Parents/Home: These 9 items measure how a youngster feels about himself viz-a-viz his home and parental relationships (e.g., my parents and I have a lot of fun together; no one pays attention to me at home).

iii. Peers: These 8 items capture how a youngster feels about himself in relation to his peers (e.g., I'm popular with kids my own age; kids pick on me very often).

iv. Assertiveness: These 7 items measure how readily a youngster feels he/she is able to assert themselves (e.g., someone usually has to tell me what to do; I can usually take care of myself).

v. School/Work: These 7 items reflect how positively the student considers his/her in-school working experiences (e.g., I'm proud of my school work; I like to be called on in class).

vi. Total: Sums the five scores above and represents an overall estimate of a youngster's self-regard.

SEI items are answered "Like me/Unlike me", with scores ranging from 0 to the total number of items for each factor (e.g., 0-14 on General). A copy of the SEI along with a description of its factor structure appears as Appendix B.

Data analyses with the SEI included 18 OH students and 149 of their randomly selected Non-OH classmates, matched on grade level and sex.

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Insert Figure 2 about here

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2. Peer Rating Scale (PRS) (Feldhusen & McDaniel, 1974)

The PRS is a class-administered, self-report measure of a youngster's social behavior in the classroom. Using a peer-rating approach (where each student in the class is rated by at least three classmates), it assesses 12 areas of student socialization, described further below.

The PRS was selected over a host of instruments purporting to measure similar dimensions because of a number of considerations. First, the PRS is an eminently practical, straightforward measure to use with a high school population of varying levels of reading ability; it takes only an average of 30 minutes to complete, and has a response format that is easy to understand and follow (ideal for the schools we were working in).

More importantly, however, it has sound psychometric properties (Feldman, McDaniel, Hynes & Widlak, 1974). The PRS was originally developed and standardized with students up to age 12, yielding highly satisfactory validity and reliability estimates (factor analytic support for the predicted factor structure and internal consistency indices around .88). Although many of the items needed minor rewording to achieve age-appropriateness with a high school population, the underlying dimensions it measures are still relevant to social functioning among 9th-12th graders. Indeed, the vast majority of the item changes consisted of substituting the word "child" with the more appropriate word, "youngster". The measure's item clustering (i.e., factor structure) and resultant scores have been otherwise left intact.

One final consideration is that aside from yielding multiple indices of social functioning for each student from the perspective of peers (most other sociometric scales yield a single, global index of peer acceptance), the PRS uses the combined perceptions of three classmates in coming up with an aggregate profile for each youngster. This gives a "truer" reading of how a youngster is perceived by his/her peers; an advantage over scales relying upon the perceptions of single respondents in deriving a youngster's sociometric status.

The following describes the PRS's 12 factors; each one consisting of 5 items describing specific social behaviors. The respondent's task is to endorse each item "yes, sometimes or no", depending on the extent to which that item characterizes the behavior of the ratee. Scores of 2, 1 and 0, respectively, are given to the response options above. PRS factor scores, therefore, range from 0 - 10.

i. Leadership: Is the ability to utilize and direct the ideas and actions of others in the pursuit of goals or solution of problems.

ii. Independence: Is the ability to think for oneself and accept social responsibility.

iii. Assertiveness: Refers to the ability to take initiative, express ideas, respond to questions, and in general show confidence.

iv. Competitiveness: Is an inner-directed need to achieve a standard of excellence in all of one's actions.

These four factors sum up to give an index of Individual Prosocial Action (IPA), which Feldhusen & McDaniel (1974) define as the individual's positive behavioral thrust toward others.

v. Cooperation: Is the ability to work compatibly with others toward a common goal.

vi. Conformity: Is the ability to behave according to norms and rules, when appropriate, instead of behaving according to personal inclinations or wishes.

vii. Authority Relations: Refers to the ability to relate to or interact with figures of authority.

viii. Control of Aggression: Refers to one's ability to inhibit verbal and physical expression of hostility and anger, especially when faced with frustrations.

These previous four factors sum to give an index of Social Interaction (SI). The result of an individual's interactions with others on an individual and on a group basis.

ix. Liking Others: Is the desire to interact positively with others.

x. Social Acceptance: Refers to a willingness on the part of the social group to allow a particular member to participate in group activities.

xi. Being Liked: Refers to affiliative feelings that are expressed by individual group members toward a particular group member.

xii. Popularity: Or social status, indicates that an individual is liked by most of the social group.

These last four factors are summed to yield the Affective Relationships (AR) index, representing the affective component of social relationships.

A copy of the PRS, an explication of its factor structure and set of instructions appear in Appendix C.

The final data analyses with the PRS included 54 ratings of OH youngsters and 309 of the Non-OH classmates.[4] These two groups were matched on grade level and sex.

[4]The N for the OH group exceeds the total N of 33 in our sample because multiple ratings of individual OH youngsters were combined.

Insert Figure 3 about here

3. Student Folder Data

In an effort to contrast the academic functioning of OH youngsters and that of their non-OH peers, we retrieved the following data from the cumulative folders of the students in our sample:

i. Grade for the Quarter (QG): Grade received in the class we surveyed during the quarter when we administered the class-wide measures. (A=4, B=3, C=2, D=1, F=0).

ii. Grade for the Semester (SG): Grade received in the surveyed class at the semester's end (same grading system as above).

iii. Days Absent: For the semester.

iv. Discipline referrals: Total number of referrals for disciplinary transgressions over the course of the semester.

v. Attendance referrals: Number of notices sent home due to excessive absences.

vi. Vocational referrals: Number of times seeing a school counselor for vocational guidance.

vii. Failure notices: Notifications sent home that failure in a particular class was possible that semester.

viii. Reading total: Grade equivalent score for Reading on the California Test of Basic Skills(CTBS) during 1980, or most recent available score.

ix. Math total: Grade equivalent score for arithmetic on the CTBS.

x. Reading (Proficiency Exam): Pass-Fail indication on the available proficiency exam.

xi. Writing (Proficiency Exam): Pass-Fail on the available proficiency exam.

xii. Mathematics (Proficiency Exam): Pass-Fail on the available proficiency exam.

A copy of the form used to collect the academic folder data appears as Appendix D.

The total number of students used in the Academic-Folder comparisons varied widely according to the availability of data across categories. These figures are detailed in the Results section along with the accompanying analyses. Demographic matching data for all the students available in these analyses are presented in Figure 4.

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Insert Figure 4 about here

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4. Participant Observer Questionnaires.

a. Teacher Questionnaire (TQ) - The TQ is a self report, 45 item questionnaire developed for the purposes of this study. Using a 5-point, Likert-type response metric, it quantifies teachers' perceptions on the following dimensions:

Section One: Perceptions and Attitudes toward Mainstreaming.

i. Training/Preparation: 4 items measuring the extent to which teachers feel prepared to meet the special needs of OH students.

ii. Resources Available: 6 items assessing teacher satisfaction with additional resources available to deal with the special needs of OH students.

iii. General Attitudes toward Mainstreaming: 6 items measuring general support toward the Mainstreaming policy.

iv. Reactions of Participants: 4 items indexing the teachers' perceptions of the satisfaction of students and parents with Mainstreaming.

v. Expectations of OH Youngsters: 3 items measuring the extent to which a teacher expects the same academic and social performance from OH youngsters as he/she does from Non-OH students.

Section two: Behavioral Observations of OH youngsters.

vi. Self Concept: 4 items measuring level of self-esteem in OH youngsters perceived by teachers.

vii. Social Interactions: 6 items measuring general level of social activity by OH children.

viii. Acting Out: 5 items on the extent to which OH students "act-out" their negative feelings.

ix. Independence: 4 items on the perceived personal autonomy of OH youngsters.

x. Assertiveness: 3 items on the observed ability of OH students to assert themselves socially.

A draft of the TQ was piloted with 8 high school teachers who made numerous helpful comments on item content and wording. Once finalized, the TQ was given to 40 teachers at the two schools via their faculty mail boxes. They were offered a $5 honorarium for their completed questionnaires, which they were asked to return completed through pre-stamped envelopes. Thirty four of the teachers thus approached returned completed questionnaires.

Descriptive information on this sample appears as Figure 5.

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Insert Figure 5 about here
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A copy of the TQ, description of its factor structure and cover letter appear as Appendix E.

b. Parent Questionnaire (PQ) - A 38-item, 5-point Likert type questionnaire was constructed by project staff to measure parents' attitudes toward mainstreaming and their perceptions of their children's behavior.

After piloting with a number of volunteers, the PQ was mailed to parents of all OH students plus a random sample (N=150) of parents of non-OH subjects. The PQ was printed in both English and Spanish and contained a card which respondents could mail back in pre-stamped envelopes to receive a $5 honorarium for their cooperation. Thirty-four parents returned fully completed PQ's. Descriptive information on this sample appears as Figure 6.

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Insert Figure 6 about here

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The PQ's factor structure was identical to that of the teacher Questionnaire described except it did not include a training/preparation factor, for obvious reasons. The number of items per factor also differed slightly. A copy of the PQ (in English and Spanish), its factor structure and cover letter appear in Appendix F.

c. Retrospective Questionnaire (RQ) - In order to elicit the feelings and experiences of people who had graduated previously from mainstreamed programs as OH students, project staff developed a Retrospective Questionnaire (RQ) consisting of 10 open-ended questions and 8 statements which respondents rated on a 5-point Likert-type scale. Questions were developed by the project staff to discover how graduates viewed their educational and social experiences in the mainstreamed classes they attended, how these experiences influenced their lives as adults, and what suggestions they could offer to current students and school administrators concerned with mainstreaming.

Respondents were randomly selected by project staff from a list of OH students who had graduated from Bassett High School in the past

few years. When this approach netted only 17 respondents, 3 others were solicited from nearby agencies working with the physically handicapped. Our total sample of 20 was interviewed according to the structured RQ and each given a $5 honorarium for their participation.

Descriptive data on that sample appears in Figure 7.

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Insert Figure 7 about here

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A copy of the RQ appears in Appendix G.

RESULTS

IX.

The results are presented in 4 main sections: (A) Self-Report Measures, (B) Sociometric Instrument, (C) Student Folder Data, and (D) Participant Observers' Questionnaires

A. Self-Report Measures

1. Classroom Environment Scale: (CES)

A series of 2-tail t tests on the four CES factors tested the differences between OH youngsters and their Non-OH classmates.

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Insert Table 1 about here
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None of the resulting t's reached the .05 criterion of significance. The Involvement factor came closest to a significant finding ($p=.14$), with the OH group reporting a higher level of class involvement than their Non-OH peers.

A series of 2-way ANOVA's looking for possible interactions between CES factors, disability status, grade level or sex of child, did not reveal any such relationships of significance.

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Insert Tables 2 and 3 about here
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2. Self-Esteem Inventory: (SEI)

Similarly, a series of 2-tail t tests were conducted on the six SEI factors, testing the differences between OH youngsters and their Non-OH classmates.

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Insert Table 4 about here
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None of the resulting t's achieved significance. The Peers Factor approximated significance most closely ($p=.12$) with the OH group reporting less peer-related, self-esteem.

2-way ANOVA's on the SEI factors looking for interactions between the SEI factors, disability status, grade level or sex of the respondent, did not reach significance.

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Insert Tables 5 and 6 about here

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B. Sociometric Instrument

1. Peer Rating Scale: (PRS)

a. The first set of analyses looked at differences between those OH and Non-OH students who had a full PRS packet filled out on each of them by their classmates (i.e., the 3 sheets making up the PRS measure were filled out, one each, by 3 different classmates. This sample will hereafter be referred to as the 3-page groups). A series of 2-tail t-tests were conducted on the 12 PRS factors, plus the 4 summative scores, to examine the differences between the scores received by the OH group and their Non-OH peers.

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Insert Table 7 about here

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The 3-page OH group received significantly higher sociometric ratings than their Non-OH counterparts on 6 of the 12 PRS factors; Independence, Competitiveness, Authority Relations, Control of Aggression, Liking Others and Popularity. They also received significantly higher ratings on the Social Interaction, summative factor. These comparisons approached significance on five other factors ($p=.16$) with the OH group, again, receiving the higher ratings.

b. Since the above comparisons used only a portion of the children tested (approximately 40%), we looked into the ratings received by children who had only 2 of their classmates fill out the PRS. We first pro-rated their scores on each of the PRS factors, from a 2-page total to their 3-page equivalent (i.e., these youngsters had either 3 or 4 out of the customary 5 items per PRS factor, filled out on them. Thus, we multiplied their 2-page factor totals by 1.67 or 1.25 if they had only 3 or 4 items filled out on them, respectively. In this manner, we "constructed" another sizable PRS sample ($N=214$) which could potentially be added to our 3-page

sample (N=149), if first proven comparable).

In order to examine the comparability of the 2 and the 3-page groups, we first ran a series of t-tests on the PRS factors between the OH and Non-OH groups, for the 2-page sample only.

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Insert Table 8 about here

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The same general patterning of results emerged, with the OH group receiving higher sociometric ratings on 12 of the 16 overall PRS factors. Overall, only 2 of the comparisons reached significance: the OH group scored higher on Liking Others, and the Non-OH group received higher ratings on Social Acceptance.

The next two sets of comparisons looked directly at the difference between the PRS factor scores of the 2 and 3-page groups, by disability status and full sample.

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Insert Tables 9, 10 and 11 about here

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None of these 42 comparisons reached significance. Indeed, only 2 went beyond the p = .20 level.

c. Thus assured that the 2 and 3-page PRS samples were not significantly different, we pooled the resulting data and examined the interrelationships among PRS factors to see the extent to which they could be considered orthogonal variables. These interrelationships were examined using Pearson, product-moment r's and are summarized in Table 12.

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Insert Table 12 about here

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The resulting matrix (based on the 16 PRS factors) consisted of 120 r's, all of which were significant at the .001 level and beyond. Although that overall finding is itself highly significant, the preponderance of the significant r's accounted for only a modest amount of common variance (overall median for the 12 non-summative PRS factors was r = .46, accounting for .21 of common variance).[5]

[5]Thus, one can assume these factors are fairly independent of one another and allow for discussion of differences between the groups on the underlying dimensions being measured.

d. Having statistical support for the desire to pool our 2 and 3-page sample into a more robust one, and the indication that the PRS factors had orthogonal properties, we next looked at differences between the OH and Non-OH groups for the combined 2 and 3-page PRS sample (TOTAL sample). These comparisons are summarized in Table 13 where a series of 2-tail t's were run on the 16 overall PRS factors.

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Insert Table 13 about here
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The CH group received significantly higher ratings on 5 of the 12 non-summative PRS factors: Independence, Competitiveness, Authority Relations, Control of Aggression and Liking Others. The Non-OH group was rated significantly higher on Social Acceptance.

The OH group also nearly achieved significantly higher scores on the popularity factor and three of the four summative factors ($p \leq .07$).

C. Student Folder Data

A series of 2-tail t tests looked at differences between the OH and Non-OH groups on 9 of the variables taken from their academic folders.

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The OH sample showed significantly higher scores on the following variables: Quarter Grade, Semester Grade and Vocational Referrals. The Non-OH sample showed significantly higher scores on these variables: Days Absent, Discipline Referrals and Math total on the California Test of Basic Skills.

Results on the Proficiency Exam for students at both high schools were given in terms of Pass/Fail. The differential performance of the two comparison groups

on the Proficiency Exam variables was examined through the use of independent, non-parametric tests (chi-squares). These data are found in Table 15.

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Insert Table 15 about here

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A significant effect was found on Reading Proficiency where a greater proportion of the OH students, for whom data were available, failed the exam. No effects of significance were found on the Writing or Math Proficiency performances.

D. Attitudes and Perceptions of Participant Observers.

1. Teachers: The attitudes of teachers toward mainstreaming and their perceptions of the behavior of OH youngsters is summarized across the 10 Questionnaire factors in Table 16.

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Insert Table 16 about here

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The mean response per item is given for each TQ factor. The meaning ascribed to these figures is discussed in the next section.

2. Parents: A series of 2-tail t tests examined the differences between the parents of OH students and Non-OH students on the 9 Parent Questionnaire factors. The mean item total per factor is the score tested for significance. These figures are found in Table 17.

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Insert Table 17 about here

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Although 4 of the resulting t's approached significance ($p < .20$), none of the comparisons actually reached the conventional .05 level of significance.

The next set of analyses looked at possible differences in attitudes and perceptions between parents and teachers as measured by the questionnaire constructed for this study. A series of 2-tail t tests looked at differences in mean item response across the 9 Questionnaire factors both groups had answered. These comparisons are found in Table 18.

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Insert Table 18 about here

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Parents achieved significantly higher scores on the Self Concept and Assertiveness factors. Teachers achieved significantly higher ratings on the Expectations factor.

3. Retrospective Sample: The Retrospective Questionnaire, as described earlier, consisted of 14 quantifiable and 10 open-ended questions administered through a structured interview schedule. The quantifiable data are summarized in Table 19.

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Insert Table 19 about here

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The question numbers in this table refer to the items on the questionnaire which may be found in Appendix G. The meaning inferred from these figures is discussed in the next section.

The open-ended questions were summarized through a 3-part process. First, the authors each read the 20 completed questionnaires to get a sense for the "type" of answers respondents were giving to each of the questions. Next, we discussed the various categories that appeared to be represented across answers, and reached consensus on the categories that

most adequately captured the range of responses. These categories are detailed in Appendix G. The third step was to tally the responses to each question across the 20 questionnaires using the categories we had set up. These data are represented in terms of percentage of answers falling into each question's response categories. These are found in Table 20.

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Insert Table 20 about here

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The ascribed meaning of these figures is discussed in the DISCUSSION section.

DISCUSSION

The current study attempted to investigate the social adjustment status of orthopedically handicapped, mainstreamed, high school youngsters. It springs from prior Mainstreaming research efforts which established a need to examine specifically handicapped groups at particular age ranges and to take a multidimensional approach, in which data from relevant, convergent sources are synthesized.

From our review of Mainstreaming research, these sources appeared to be the perspectives of self-reports, peer ratings, academic performance data and the views of participant observers such as teachers, parents and "graduates" of Mainstreamed classrooms. Our results are first discussed individually according to the above clusters of data sources, then considered collectively.

A. Self-Report Data

The data from the Classroom Environment Scale and Self Esteem Inventory were intended to yield a sense of how OH and Non-OH students possibly differed in their perceptions of their mainstreamed classrooms and themselves. The most conservative conclusion to be drawn from the data would be that no differences exist in the views of these two groups toward their classroom social climate or on several, key self-esteem dimensions. However, because of two near - significant findings and the very stringent test to which our design subjected this question, a couple of speculative comments appear warranted.

On the CES, the OH group reported feeling a higher sense of Involvement in their classrooms. Although this finding did not reach significance ($p < .14$) it bears mentioning that the ratings from the 19 OH respondents came from nearly the same number of classrooms; the "suggestiveness" of this finding, therefore, is given added strength by the generalizability allowed by the design, (i.e., for such a finding to materialize across 22 classrooms, a strong effect must be present).

It may well be that OH students tend to have a greater attentive interest than the "norm" in their class activities. Our not finding grade level or sex interactions also adds to this possibility. However, because of our relatively small OH sample size, a couple of extreme scores in either direction may have contributed disproportionately to the sample mean, giving a misleading sense of the comparison. Thus, this directional finding on the CES Involvement factor should, at most, be considered provocative and orient future inquiries into the question of differential classroom climate perception between OH students and their peers.

Similarly on the SEI, the sum of the findings suggest no differences in self perceptions between the two target groups. In spite of the greater "sensitivity" afforded by looking at self-esteem with five independent referrents, the analyses failed to detect any statistically significant differences. Again, there may well be some reason to suspect on the basis of our data that, indeed, the self-esteem of OH and Non-OH youngsters differs on some dimensions.

Comparisons on the Peers ($p < .12$) and less strongly, Assertiveness ($p < .25$) factors of the SEI approached significance, with the OH group rating itself lower than the Non-OH groups in both instances. This set of directional findings begins hinting that, perhaps, in the Mainstreamed classroom, OH students have a slight sense of inadequacy in regard to their peers. More remote is the possibility implied by these data that OH youngsters also have a less sturdy sense of their own assertiveness than do their Non-OH counterparts. Although these findings are not being influenced by the interacting effects of grade level or sex, again, our small sample size for the OH group (in particular) restricts the power of the above conjectures.

Taken in concert, one might be led by the above findings to envision the "general" Mainstreamed classroom situation as one where, on the average, there are

no telling differences between OH and Non-OH students in their self-regard or sense of classroom findings. Our near-significant findings in a stringent design may suggest, however, that below the surface of no apparent differences, OH youngsters may be harboring strong feelings of interest and involvement in their classrooms, along with an underlying sense of insecurity about their self-regard vis-a-vis their classmates and their own assertiveness. The next body of data reported strongly substantiates the notion that the peer status of OH students in mainstreamed classrooms is different from that of their non-handicapped classmates; however, not in the direction one would presume.

B. Sociometric Findings

The feelings of peers in school toward one another has long been established as an important correlate and determinant of adjustment status in youngsters. Our use of the PRS aimed at providing a glimpse of how OH students fared when compared with Non-OH classmates on a number of important sociometric variables.

The most central finding to emerge from the PRS data is that OH youngsters in Mainstreamed classrooms received significantly higher sociometric ratings than their Non-OH classmates. The most reliable examination of that question from our study comes from our full-packet PRS data (Table 7). There, it was shown that the OH group received significantly higher scores on 6 of the 12 PRS factors, and a nearly significantly higher score on another one. Given the statistically independent quality of the PRS factors found with our entire sample, and their fairly sound grounding in prior research and theory cultivated by their developers, it appears that the PRS analyses yielded a very striking set of results.

Based on the Full-Packet Sample (our most reliable since the judgments rendered are based on the ratings of 3 different peers for each youngster) the factor differences reaching significance are worthy of individual comments.

The OH group was rated by their peers as being more independent and assertive than the non-handicapped group. How youngsters in our sample reached their conclusions about the OH group is beyond the ability of the current data to establish. One can speculate that, perhaps, seeing someone with a visible disability "making it" in a competitive environment leads the observer to attribute to the OH youngster considerable ability to function autonomously, and to view them with admiration.

In their social interactions, OH youngsters were also rated as relating better with authority figures and inhibiting verbal and phsycial expressions of anger. These data would appear to be consistent with the previously discussed Self-Report findings where the OH sample described itself as being more involved in their class activities (which would certainly please authority figures in that setting and be seen by peers as accomodating on the part of OH students). The significantly higher scores in Control of Aggression coincides more directly with the OH group's reportedly somewhat lower score on the SEI Assertiveness factor. Perhaps this is convergent evidence of the OH students' more tranquil, rules-abiding profile in the Mainstreamed classroom. The academic folder and questionnaire data to be discussed similarly supports this notion.

It is in the Affective Relationship (AR) section of the PRS that we received our most dramatic glimpses into the sociometric status of OH students. Their ratings were significantly higher on the Liking Others and Popularity factors. They neared significance in the same direction on the Being Liked factor, but curiously, received near significantly lower ratings on the Social Acceptance factor.

These findings indicate that OH students are being described as liked by most of their social group and being the recipients of more affiliative feelings from individual group members. Thus, the favorable impression cast by the earlier PRS findings is substantiated by the Affective Relationships factors. In direct

contrast to this, it is somewhat puzzling to note a finding approaching significance ($p < .18$) in the opposite direction on the Social Acceptance factor. (This factor denotes the group's willingness to allow particular class members to join in group activities). This indicates that even though OH youngsters are given positive sociometric ratings, they are not sought out to join in group activities. The temptation here is to link this finding with the earlier SEI result showing lower (though not significantly so) peer related self-esteem to connote an affective classroom atmosphere in which OH youngsters experience positive affiliative feelings from their peers; but feelings which are just short of inviting them to join in with the group's activities. To the extent that the preceding captures the actual social perceptions felt by OH youngsters in Mainstreamed classrooms, it may help to explain their non-different global sense of self-esteem accompanied by an "insecure" sense of status with their peers.

The sociometric data reported in this study also included a more substantial sample made up of the Full-Packet PRS group and those consisting of factor scores pro-rated from 2 page/2 rater totals. Although this latter group proved statistically comparable to our 3 page sample, it is our contention that they represent less reliable and valid estimates of a youngster's social status. Factor scores based on 3 items (as opposed to the available total of 5) are by definition less reliable and, to some unknown extent, less valid indicants of actual sociometric than those computed from Full Scale scores.

Combining the 2 and 3 page PRS groups, nonetheless, yielded remarkably similar findings: in the combined sample analyses, the OH group received significantly higher ratings on 5 of the same 6 factors reaching significance in the Full-Packet analyses. Only Popularity did not reach significance in this round of comparisons. Interestingly, Social Acceptance did acheive significance, with the OH

group getting lower scores.

In summary, while this study lends statistical support for the comparability of PRS factor scores derived with 2 or 3 page totals, the authors believe the Full Packet data to be more reliable and valid since they are based on the ratings of 3 different peers, across 33% more items. This minimizes the spurious effects of rater response tendencies and unique rater-ratee relationships while maximizing the number of social behaviors examined.

Two alternate classes of interpretations suggest themselves in understanding the basic finding that OH students received significantly higher sociometric ratings than their Non-OH peers: a) they are a genuinely admired group for a variety of reasons, or b) the data reflect a "defensive" reaction on the part of the peers.

The first set of interpretations may stem from a very plausible reflex on the part of peers to perceive OH students as having struggled past a debilitating physical handicap to achieve the same way that everyone else does. Carried to a stereotype, putting a person with a handicap on a "Pedestal" may have its roots in this tendency.

Another possible explanation along this line is that, indeed, ours was a sample of OH students genuinely admired and liked by their peers to an uncommon degree. The successful mainstreaming program at the sites, additionally, may be partly responsible for giving these youngsters a "front and center" status in the classrooms.

The second class of interpretation follows indirectly from the data. We are forced to consider it, nonetheless, because our sociometric findings run counter to those previously established with younger groups of children with handicaps, to those of our Retrospective Questionnaire findings and to our own clinical experience in counseling and teaching with the OH population. To have OH youngsters receive such "whoppingly" complimentary sociometric ratings in the face of prior

research evidence to the contrary (Richardson, 1970) must at least raise the possibility of "defensive" (counter-phobic, if one would) ratings on the part of peers. In other words, these ratings may indicate a fear or guilt about assigning negative characteristics to people with disabilities.

Although it's currently in vogue to be accepting of people with handicaps, one would expect genuine acceptance to yield ratings equivalent to those received by Non-OH peers. That is, some OH individuals would receive more positive ratings and others more negative ones depending on their characteristics as individuals. In balance, the scores from a group of such youngsters would not differ from those received by a random sample of their Non-OH peers. Our OH sample, by contrast, received dramatically different scores; their status is still very much different, though for our group of high schoolers it has a mostly positive and perhaps ambivalent quality.

C. Academic Folder Data

Our two comparison groups looked distinctly different on the academic performance data. On the whole, the performance of OH youngsters was more favorable than that of their Non-OH peers. OH students received significantly higher grades for the Quarter, for the Semester, fewer days absent and fewer discipline referrals. In contrast with the above, the Non-OH group received somewhat higher scores on the Math proficiency and Reading achievement scores.

The impression that arises from the above melds with the data reporter earlier to suggest an image of the OH individual as a more involved, liked, better performing student, with a slight underlying sense of self-doubt with regard to peer acceptance.

D. Questionnaire Data

1. Teachers

Thirty-four out of the 40 teachers we approached cooperated in filling

out our specially constructed questionnaire. Thus, our predominantly female (23 out of the 34), well experienced sample (an average of 13 years teaching experience; 6 in mainstreamed classrooms), can also be said to be highly representative of teachers from our District involved in Mainstreaming.

The most salient aspect of the questionnaire findings would seem to be the general positivity expressed by teachers toward the practice of mainstreaming. Their General Attitudes and their perceived Reactions of Participants mean response scores suggest that they are in agreement with the practice, and that they feel students and parents are also in favor. They are in strong agreement with expecting the same, socially and academically, of OH youngsters as of their Non-OH peers.

Teachers were less supportive of the idea that they have enough Training and Preparation, and Resources available to deal with the needs of OH students.

Responses from Part II of the teacher Questionnaire would appear to indicate that this group of respondents agree that OH youngsters are very similar to their Non-OH peers in Social Interactions, Acting Out, Independence, and Assertiveness. As a group they appear to be undecided as to whether the self-concept of OH students differs from that of their Non-OH peers, as a whole.

Taken collectively, these data appear to suggest that teachers are generally approving of Mainstreaming students with orthopedic disabilities. The teachers in our sample also indicated that other students and parents are similarly supportive of this educational practice. In keeping with prior research in this area, they expressed some doubts that their training had prepared them fully to handle the special needs of OH students. They also noted the additional resources available to them for this task are not sufficient.

Their view of OH students in their classroom coincides in some regards with the Self Report and Sociometric data discussed earlier. Results from Part II of

the teacher Questionnaire suggests that OH students are being perceived no differently in their social behavior from Non-OH classmates, on several dimensions of social functioning. The one area where teachers expressed some concern, Self Concept, coincides with the mild indication of the Peers factor of the SEI where OH students scored directionally lower than their Non-OH peers.

Interestingly, teachers noted no differences in the Social Interactions of our two student groups; certainly in keeping with the positive aura projected by the bulk of the PRS data. One can only speculate whether they are aware of the social phenomenon suggested by the OH group's lower Social Acceptance score on the PRS. OH youngsters may be learning and interacting in classrooms where teachers are unaware that theirs is a distinctly different disadvantageous peer sociometric status.

2. Parents

Our sample of 34 patents consisted mostly of students' mothers (24 out of the 34) and parents of Non-OH youngsters (N=22), averaging about 53 years of age. Although we made efforts to recruit a large number of respondents by offering a $5 honorarium and including both an English and Spanish version of the questionnaire, the return rate of completed questionnaires was only 16%. It is only prudent, therefore, to regard these data as not likely to be representative of the attitudes and observations held by parents of mainstreamed youngsters in general. As such, the findings from this measure should be taken in suggestive/advisorly fashion and call for further, more representative research in this area.

In our sample, Parents of OH and Non-OH students did not differ significantly in their attitudes toward mainstreaming or the observations of their youngsters' behaviors. Directionally, the Parents of OH youngsters reported more positive General Attitudes toward Mainstreaming, Reactions on the part of Main-

streaming Participants and Resources Available in the community. However, none of these findings reached significance.

Parents of OH students also reported lower levels of Social Interactions for their youngsters than did Parents of Non-OH students, but though provocative, this finding also did not achieve statistical significance. The sense of this finding is in keeping with our sociometric data where OH students were rated as less likely to be invited to join in with group activities.

Comparisons of questionnaire responses between Parents and Teachers yielded three significant findings. In general, teachers held higher expectations of OH youngsters than did Parents, while Parents held more positive views than teachers on OH students' Self Concept and Assertiveness.

Bearing in mind the precautions merited by our Parents samples' lack of representability, one can assume cautiously that perhaps these groups are privy to different samples of the OH group's behavior; with Parents seeing a more self-assured, assertive profile.

3. Retrospective Sample

It was difficult to track down a sizable number of graduates of Mainstreamed classrooms from Bassett and El Rancho High School. People have a tendency to move around after high school and not leave forwarding addresses with their schools, so we added 3 respondents from outside of the Bassett-El Rancho graduate pool to complete our Retrospective Sample of 20.

As a group, the respondents were: young ($\bar{X}$ age = 25 years); graduating from high school in the last 9 years; experienced in Mainstream classes and currently involved in higher education. Thus, they appear to be a group with recent memories of Mainstreaming and apparently successful educational experiences.

The quantifiable data from this Questionnaire reflects generally positive recollections of their Mainstreaming experiences. Graduates reported having

enjoyed these classes, benefitting from them socially and educationally, and said they would recommend these classes for students with and without physical disabilities. The one item which contrasted with this positive recall asked whether they had experienced rejection from their non-disabled peers. The mean response on this item showed that the group, on the whole, was divided on that question. It would seem fair to conclude that at least some of the respondents in our Retrospective sample had experienced social rejection from their peers without disabilities.

The open-ended questions yielded responses in keeping with the above impressions. Their recollections of their Mainstreamed classrooms were positively tinged. This included the data from question #3 where mostly positive memories were reported of richer education and a taste of "real life" in these classes.

The social-experiences questions (4, 5 and 7), give a predominantly positive outlook of the mainstreamed classrooms (see Table 20). A goodly percentage of the responses (35% on question #4) indicated that their social experiences improved over time. Questions 9 and 10 indicated that, in retrospect, a significant minority of the respondents had peer-related concerns. On question 9, asking what they wished had been different, 25% of the respondents said they wished Non-OH peers had been more accepting or concerned. Number 10 asked them what schools could do to improve the Mainstreaming experience: 40% said the schools could help regular education students learn more about the nature and limitations of orthopedic disabilities (i.e., understand them better).

E. Synthesis of Findings

The tapestry of findings quilted together in this study begins yielding a coherent picture of the OH student in mainstreamed classrooms. The overall impression is one where participants and OH students themselves are supportive of

mainstreaming as an educational policy. This positivity, in attitudes is paralleled in a number of socio-affective variables.

High school OH youngsters in mainstreamed classrooms are as successful academically as their Non-OH peers (as most of our data taken from their Academic Folder suggests). They also give indications of feeling somewhat more involved in their classroom activities. Although, on the whole, their reported self esteem does not differ from that of their peers, there is a good possibility that they experience some feelings of inadequacy with regard to these peers.

The root of this discomfort may have a very real, immediate basis; peers gave OH students significantly higher sociometric ratings on a number of dimensions, but significantly lower social acceptance scores. Apparently, peers can express positive attitudes toward OH students, but their attitudes leave them short of actually inviting OH youngsters to become part of their group activities. A somewhat insecure sense of peer-related self esteem becomes understandable in concert with the mixed, ambivalent feelings OH students receive from peers. Perhaps fear and guilt about expressing ordinarily "negative" attitudes toward OH youngsters may be contributing to keeping Non-OH students at a guarded social distance from the mainstreamed classmates.

The above social scenario, apparently, is one teachers are unaware of. Although they were strongly in favor of mainstreaming (with a slight qualification; that enough training and special services are not available), they basically perceived no differences in the social interactions of OH students and their Non-OH peers. Perhaps they are lulled into a sense of serenity about this by the OH students' generally greater sense of involvement, better class performance and rules abiding profile. However, as the data from the sociometric scale and Retrospective questionnaire strongly suggest, social rejection by their classmates is something OH youngsters experience and feel acutely; and it's something

which has a notable effect on their feelings of self worth.

F. Summary and Conclusions

Results from this study would appear to be of special interest to educators involved with the mainstreaming of youngsters with physical handicaps. Our data suggests that the intended social benefits of mainstreaming may well not be taking place; acceptance of OH youngsters was not found. Instead, peers seem to be expressing "defensively" positive attitudes which mask an underlying predisposition to keep social distance. Tranquil, academically competent social behavior on the part of OH students may be leading teachers to suspect everything is "fine" socially. Our data lead us to suspect differently.

Our findings with high school students stand in sharp contrast with those done with younger populations. Those studies typically show outright peer rejection of those with various forms of handicaps. Could our findings reflect the continuation of feelings from childhood into adolescence about those with physical handicaps? Are fear and guilt being elicited just the same among high school Non-OH students, but handled differently? Our findings would support such a conclusion.

Although this study remains in need of replication and cannot purport to answer questions about the causes for the socioemotional profile of the mainstreamed classroom we uncovered, several issues for further research do suggest themselves.

Why are OH students perceived differently, although more favorably, than their peers? Is it as a result of genuine admiration and respect? Or, is it the result of an unwillingness to ascribe any negative qualities to a person with a disability?

In either case, what factors in their education, developmental level, ethnic background, previous experiences with people with disabilities, or other variables

could account for the feelings of these non-handicapped students? Despite these high ratings, there is the implication that OH students may not be fully accepted socially in practice. Is that suggestion substantiated by observational data?

Another matter to be "teased out" by future research is what contribution, if any, does the cultural background of respondents make to their attitudes toward those with orthopedic handicaps. Ours was a predominantly Hispanic, lower socioeconomic sample. Are the findings yielded by this population replicated with other societal groups? It remains for future researchers to replicate our findings and overcome the methodological shortcomings we encumbered in contributing to the understanding of the mainstreamed, orthopedically handicapped student.

BIBLIOGRAPHY

Alexander, C., & Strain, P. S. A review of educators' attitudes toward handicapped children and the concept of mainstreaming. Psychology in the Schools, 1978, 15, (3), 390-396.

Ashley, J. G. Mainstreaming: one step forward, two steps back. Educating Exceptional Children, American Educator, 1977.

Baker, J. L., & Gottlieb, J. Attitudes of teachers toward mainstreaming retarded children. In J. Gottlieb (Ed.) Educating Mentally Retarded Persons in the Mainstreamed. University Park Press, Baltimore, 1980.

Barker, R. Ecological Psychology. Stanford: Stanford University Press, 1968.

Barclay, J. R., & Kehle, T. J. The impact of handicapped students on other students in the classroom. Journal of Research and Development in Education, 1979, 12 (4), 80-92.

Barker R. C. Somatopsychological significance of crippling. Bulletin 55 of the Social Science Research Council, New York, 1953, pp. 59-89.

Billings, H. K. An exploratory study of the attitudes of noncrippled children toward crippled children in three selected elementary schools. The Journal of Experimental Education, 1963, 31 (3), 381-387.

Boersma, F. J., Chapman, J. W., & Battle, J. Academic self concept change in special education students: Some suggestions for interpreting self concept scores. Journal of Special Education, 1979, 13, (4), 433-442.

Brophy, J. E., & Good, T. L. Teacher-student relationships. New York: Holt, 1974.

Brown, L., Branston, M. B., Hanure-Nietupski, S., Johnson, F., Wilcox, B., & Gruenewald, L. A rationale for comprehensive longitudinal interactions between severely handicapped students and non-handicapped students and other citizens. AAESPH Review, 1979, 4 (1), 3-14.

Bruininks, V. L. Actual and perceived peer status learning--Disabled students in mainstream programs. The Journal of Special Education, 1978, 12 (1), 51-58.

Bruininks, R. H., Rynders, J. E., & GRoss, J. C. Social acceptance of mildly retarded pupils in resource rooms and regular classes. American Journal of Mental Deficiency, 1974, 78 (4), 377-383.

Budoff, M., & Gottlieb, J. Special class students mainstreamed: A study of an aptitude (learning potential) x treatment interaction. American Journal of Mental Deficiency, 1976, 81, 1-11.

Cooke, T. P., Apolloni, T., & Cooke, S. A. Normal preschool children as behavioral models for retarded peers. Exceptional Children, 1977, 43, 531-532.

Coopersmith, S. The antecedents of self esteem. San Francisco: Freeman, 1967.

Feldhusen, J., & McDaniel, E. Social Behavior Assessment of Elementary School Children. Paper presented at the annual meeting of the National Council on Measurement in Education. Chicago, April, 1974.

Feldhusen, J., McDaniel, E., Hynes, K., & Widlak, F. Assessment of Social Behavior of Elementary School Children. Unpublished manuscript submitted for publication.

Gickling, E. E., & Theobald, J. T. Mainstreaming: Affect or Effect. The Journal of Special Education, 1975, 9 (3), 317-328.

Gottlieb, J. Public, peer and professional attitudes toward mentally retarded persons. In M. J. Begab & S. A. Richardson (Eds.), The mentally retarded and society: A social science perspective. Baltimore, Md.: University Park Press, 1975.

Gottlieb, J., Semmel, M. I., & Veldman, D. J. Correlates of social status among mainstreamed mentally retarded children. Journal of Educational Psychology, 1978, 70 (3), 396-405.

Graham, S., Hudson, F., Burdy, N. B., & Carpenter, D. Educational personnels perceptions of mainstreaming and resource-room effectiveness. Psychology in the Schools, 1980, 17 (1), 128-134.

Johnson, R., Tynders, J., Johnson, D. W., Schmidt, B., & Haider, S. Interaction between handicapped and non-handicapped teenagers as a function of situational goal structuring: Implications for mainstreaming. American Educational Research Journal, 1979, 16, (2), 161-167.

Jones, R. L., Gottlieb, J., Guskin, S., & Yoshida, R. K. Evaluating Mainstream Programs: Models, caveats, considerations and guidelines. Exceptional Children, 1978, 588-601.

Kaufman, M. J., Gottlieb, J., Agard, J. A., & Kucic, M. S. Mainstreaming: Toward an Explication of the Construct. Intramural Research. Washington, D. C.: Bureau of Education for the Handicapped (USOE), (DHEW, 1975).

Linton, T. E., & Juul, K. D. Mainstreaming: time for reassessment. Educational Leadership, 1980, 37, 433-437.

MacMillan, D. L., Meyers, C. E., & Yoshida, R. K. Regular class teachers' perceptions of transition programs for EMR students and their impact on the students. Psychology in the Schools, 1978, 19 (1), 99-103.

Meyers, C. E., MacMillan, D. L., & Yoshida, R. K. Regular class placement of EMR students, from efficacy to mainstreaming: A review of issues and research. In J. Gottlieb (Ed.), Educating Mentally Retarded Persons in the Mainstream. Baltimore, Md.: University Park Press, 1980.

Moore, J. & Fine, M. J. Regular and special class teachers' perceptions of normal and exceptional children and their attitudes toward mainstreaming. Psychology in the Schools, 1978, 19 (2), 253-259.

Moos, R. The Social Climate Scales: An Overview. Consulting Psychologists Press, Palo Alto, 1974.

Moos, R. H. Conceptualization of Human Environments. American Psychologist, 1973, 652-665.

Orlansky, M. D. Teasing and name-calling: What can a special education teacher do? Journal for Special Education, 1980, 16 (2), 127-129.

Parish, T. S., Dyck, N., & Kappes, B. M. Stereotypes concerning normal and handicapped children. The Journal of Psychology, 1979, 102, 63-70.

Parish, T. S., Ohlsen, R. L., & Parish J. G. A look at Mainstreaming in light of children's attitudes toward the handicapped. Perceptual and Motor Skills, 1978, 46, 1019-1021.

Quay, L. C. Academic skills. In N. R. Ellis (Ed.) Handbook of Mental Deficiency. New York: McGraw Hill, 1963.

Ribner, S. The effects of Special class placement on the self-concept of exceptional children. Journal of Learning Disabilities, 1978, 11 (5), 60-64.

Richardson, S. A. Age and sex differences in values toward physical handicaps. Journal of Health and Social Behavior, 1970, 11, 207-214.

Ross, M. Mainstreaming: Some social considerations. The Australian Teacher of the Deaf, 1977, 18 (2), 21-30.

Semmel, M., & Cheney, C. O. Social acceptance and self-concept of handicapped pupils in mainstreamed environments. Education Unlimited, 1979, 65-68.

Simon, W. E. Some sociometric evidence for validity of Coopersmith's Self-Esteem Inventory. Perceptual and Motor Skills, 1972, 34, 93-94.

Thurman, S. K., & Fiorelli, J. S. Perspectives on Normalization. Journal of Special Education, 1979, 13 (3), 339-346.

Thurman, S. K., & Lewis, M. Children's response to differences: Some possible implications for Mainstreaming. Exceptional Children, 1979, 468-470.

Trickett, E., & Moos, R. The social environment of junior high and high school classrooms. Journal of Educational Psychology, 1973, 65, 93-102.

Volpe, R. Orthopedic disability, restriction and role taking activity. The Journal of Special Education, 1976, 10 (4), 371-381.

Walker, V. S. The efficacy of the resource room for educating retarded children. Exceptional Children, 1974, 40, 288-289.

Zigler, E., & Muenchow, S. Mainstreaming: The proof is in the implementation. American Psychologist, 1979, 34 (10), 993-996.

Figure 1

Matching OH and Non-OH Groups on Grade Level and Sex
(Classroom Environment Scale)

	9th	10th	11th	12th	
1. a. OH	3	3	3	10	N=19
Non-OH	60	44	38	48	N=190

$X^2_{(3)} = 6.66 \quad p \leq .08$

	Girls	Boys	
1. b. OH	12	7	N=19
Non-OH	110	80	N=190

$X^2_{(1)} = .04 \quad p \leq .84$

Figure 2

Matching OH and Non-OH Groups on Grade Level and Sex
(Self Esteem Inventory)

5. a.

	9th	10th	11th	12th	
OH	4	5	3	6	N=18
Non-OH	48	26	21	54	N=149

$X^2_{(3)} = 1.55 \quad p \leq .67$

5. b.

	Girls	Boys	
OH	9	9	N=18
Non-OH	72	77	N=149

$X^2_{(1)} = .01 \quad p \leq .99$

Figure 3

Matching OH and Non-OH Groups on Grade Level and Sex
(Peer Rating Scale)

		9th	10th	11th	12th	
9. a.	OH	11	13	8	21	N=53
	Non-OH	99	61	55	94	N=309

$X^2_{(3)} = 3.80 \quad p \leq .28$

		Girls	Boys	
9. b.	OH	36	17	N=53
	Non-OH	165	144	N=309

$X^2_{(1)} = 3.30 \quad p \leq .07$

Figure 4

Demographic Matching for OH and Non-OH Groups
(Academic Folder Data)

		9th	10th	11th	12th	
17 a.	OH	6	9	7	8	N=30
	Non-OH	25	44	37	42	N=148

$X^2_{(3)} = .19 \quad p \leq .98$

		Girls	Boys	
17 b.	OH	18	12	N=30
	Non-OH	77	71	N=148

$X^2_{(1)} = .36 \quad p \leq .55$

Figure 5

Descriptive Demographic Statistics for Teacher Questionnaire Sample (N=34)

		Females	Males
1.	Sex:	11	23

		$\bar{X}$	S.D.
2.	Age:	41.35	9.00

		$\bar{X}$	S.D.
3.	Years of Experience:	12.65	6.60

		$\bar{X}$	S.D.
4.	Years of Experience in Mainstreamed Classrooms:	6.27	5.08

		$\bar{X}$	S.D.
5.	Number of Mainstreamed Classrooms Taught Currently:	2.15	1.74

Figure 6

Descriptive Demographic Statistics for Parent Questionnaire Sample (N-34)

1. Disability Status of Youngsters:

   Orthopedically Handicapped = 12

   Non-Orthopedically Handicapped = 22

2. Relationship to Youngster:

   Mother: 24

   Father: 5

   Guardian: 4

   Other: 1

3. Respondent's Age:

	$\bar{X}$	S.D.
	53.29	20.34

Figure 7

Descriptive Statistics: Retrospective Sample (N=20)

Category	$\bar{X}$	S.D.	%
Age	24.9	9.53	
Sex			60F 40M
Date grad.	1972	17.73	
# years MS	3.45	.77	
#MS classes	14.65	6.69	
Work			70 none 20 part 10 full
Education			30 none 25 part 45 full
Parenting			85 no 15 yes

TABLE 1

Means, Standard Deviations and t's Comparing OH and Non OH Samples: Classroom Environment Scale

Factors	OH (N=19)		Non OH (N=190)		t
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	
Involvement	5.32	2.48	4.37	2.66	1.47
Affiliation	5.79	2.66	6.52	2.45	1.22
Teacher Support	7.11	2.51	6.88	2.31	.40
Total	18.21	7.04	17.77	5.97	.30

Table 2

Disability Status X Grade Comparisons: Classroom Environment Scale

		9th	10th	11th	12th	F(a)
Involvement	OH	3.33(3)*	3.67(3)	3.33(3)	7.00(10)	.02
	Non-OH	3.23(60)	3.73(44)	3.66(38)	6.94(48)	
Affiliation	OH	5.67(3)	4.00(3)	4.00(3)	6.90(10)	.26
	Non-OH	6.10(60	6.07(44)	5.47(38)	8.27(48)	
Teacher Support	OH	4.00(3)	5.00(3)	6.67(3)	8.80(10)	.92
	Non-OH	5.48(60)	6.77(44)	6.97(38)	8.67(48)	
Total	OH	13.00(3)	12.67(3)	14.00(3)	22.70(10	.22
	Non-OH	14.82(60)	16.57(44)	16.11(38)	23.88(48)	

a: 2-way interactions (disability status X grade)

*: N's

TABLE 3

Disability Status X Sex Interactions: Classroom Environment Scale

		Boys	Girls	F(a)
Involvement:	OH	6.00 (7)	4.92 (12)	1.27
	Non OH	4.40 (80)	4.35 (110)	
Affiliation:	OH	6.00 (7)	5.67 (12)	.07
	Non OH	6.52 (80)	6.51 (110)	
Teacher Support:	OH	7.43 (7)	6.92 (12)	.82
	Non OH	6.57 (80)	7.11 (110)	
Total:	OH	19.43 (7)	17.50 (12)	.62
	Non OH	17.50 (80)	17.96 (110)	

a: 2-way interactions (disability status x sex)

TABLE 4

Means, Standard Deviations and t's comparing OH and Non OH Samples: Self Esteem Inventory

Factors	OH (N=18)		Non OH (N=149)		t
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	
General	9.61	3.01	9.95	2.77	.48
Parents/Home	4.89	2.14	5.44	2.36	.95
Peers	4.22	1.67	4.86	1.65	1.55
Assertiveness	4.11	1.64	4.54	1.49	1.15
School/Work	3.50	1.34	3.50	1.69	.01
Total	26.33	7.16	28.30	6.96	1.13

TABLE 5

Disability Status X Grade Interactions: Self Esteem Inventory

		9th	10th	11th	12th	F(a)
General:	OH	10.00 (4)	7.40 (5)	8.67 (3)	11.67 (6)	1.56
	Non OH	9.00 (48)	9.69 (26)	10.19 (21)	10.81 (54)	
Parents/Home:	OH	5.00 (4)	5.40 (5)	5.00 (3)	4.33 (6)	.54
	Non OH	5.04 (48)	5.12 (26)	5.76 (21)	5.83 (54)	
Peers:	OH	3.00 (4)	3.80 (5)	5.33 (3)	4.83 (6)	.81
	Non OH	4.69 (48)	4.31 (26)	5.14 (21)	5.17 (54)	
Assertiveness:	OH	2.75 (4)	4.00 (5)	4.33 (3)	5.00 (6)	2.21
	Non OH	4.67 (48)	3.62 (26)	5.00 (21)	4.70 (54)	
School/Work:	OH	2.50 (4)	3.40 (5)	3.00 (3)	4.50 (6)	.87
	Non OH	3.33 (48)	2.58 (26)	3.43 (21)	4.13 (54)	
Total:	OH	23.25 (4)	24.00 (5)	26.33 (3)	30.33 (6)	.21
	Non OH	26.73 (48)	25.31 (26)	29.52 (21)	30.65 (54)	

a: 2-way interactions (Disability Status x grade)

TABLE 6

Disability Status X Sex Interactions: Self Esteem Inventory

		Boys	Girls	F(a)
General:	OH	10.33 (9)	8.89 (9)	.74
	Non OH	10.06 (77)	9.82 (72)	
Parents/Home:	OH	5.00 (9)	4.78 (9)	.09
	Non OH	5.71 (77)	5.15 (72)	
Peers:	OH	4.78 (9)	3.67 (9)	1.75
	Non OH	4.87 (77)	4.85 (72)	
Assertiveness:	OH	4.44 (9)	3.78 (9)	.94
	Non OH	4.64 (77)	4.44 (72)	
School/Work:	OH	3.56 (9)	3.44 (9)	.38
	Non OH	3.31 (77)	3.71 (72)	
Total:	OH	28.11 (9)	24.56 (9)	.71
	Non OH	28.60 (77)	27.97 (72)	

a: 2-way interactions (Disability status x sex)

TABLE 7

Means, Standard Deviations and t's comparing OH and Non OH samples on the PEER RATING SCALE (3 page sample)

	OH (N=29)		Non OH (N=120)		t
INDIVIDUAL	$\bar{X}$	S.D.	$\bar{X}$	S.D.	
PROSOCIAL ACTION (IPA)					
Leadership	3.03	3.42	3.43	1.97	.83
Independence	7.45	4.60	5.59	2.10	3.26 $\pm$
Assertiveness	4.55	4.52	4.33	2.54	.36
Competitiveness	6.66	5.39	5.32	2.00	2.18*
SOCIAL INTERACTION (SI)					
Cooperation	5.90	4.23	5.69	2.19	.37
Conformity	6.45	5.71	6.26	2.04	.30
Authority Relations	8.45	4.90	6.40	2.48	3.21 +
Control of Aggression	7.79	5.07	5.90	2.47	2.92 +
AFFECTIVE RELATIONSHIPS (AR)					
Liking Others	8.24	4.58	7.05	1.93	2.18*
Social Acceptance	6.48	5.56	7.37	2.26	1.35
Being Liked	7.86	5.28	7.00	2.04	1.41
Popularity	5.62	5.56	4.34	2.02	2.04*
IPA	21.69	16.84	18.67	6.01	1.60
SI	28.59	18.93	24.25	7.23	1.99*
AR	28.21	20.05	25.76	6.37	1.13
TOTAL	78.48	55.27	68.68	16.39	1.68

*$p \leq .05$ +$p \leq .01$ $\pm p \leq .001$

TABLE 8

PEER RATING SCALE: 2 page sample, OH vs. Non OH groups

	OH (N=25)		Non OH (N=189)		t
INDIVIDUAL	$\bar{X}$	S.D.	$\bar{X}$	S.D.	
PROSOCIAL ACTION (IPA)					
Leadership	3.12	2.80	3.44	2.43	.61
Independence	6.04	2.75	5.68	2.79	.61
Assertiveness	4.76	2.67	4.28	2.54	.89
Competitiveness	5.96	2.87	5.33	2.38	1.21
SOCIAL INTERACTION (SI)					
Cooperation	5.00	3.01	5.92	2.59	1.64
Conformity	6.00	2.60	6.30	2.29	.55
Authority Relations	7.16	2.19	6.47	2.54	1.30
Control of Aggression	7.04	2.34	6.18	2.57	1.59
AFFECTIVE RELATIONSHIPS (AR)					
Liking Others	8.08	2.14	6.96	2.25	2.36 +
Social Acceptance	6.36	2.41	7.62	2.27	2.58 +
Being Liked	7.08	2.27	6.94	2.58	.26
Popularity	5.00	2.52	4.71	2.63	.50
IPA	19.88	7.13	18.72	6.84	.79
SI	25.20	6.27	24.84	7.22	.24
AR	26.52	7.55	26.24	7.58	.17
TOTAL	71.60	17.68	69.80	18.20	.47

$^{*}p \leq .05$ $^{+}p \leq .01$ $^{+}p \leq .001$

- TABLE 9

PEER RATING SCALE: OH Sample, 2 vs. 3 page groups

	3-page		2-page		
INDIVIDUAL	OH (N=28)		OH (N=25)		t
PROSOCIAL ACTION (IPA)	$\bar{X}$	S.D.	$\bar{X}$	S.D.	
Leadership	2.46	1.53	3.12	2.80	1.07
Independence	6.68	2.02	6.04	2.75	.97
Assertiveness	3.79	1.87	4.76	2.67	1.55
Competitiveness	5.71	1.88	5.96	2.87	.37
SOCIAL INTERACTION (SI)					
Cooperation	5.18	1.74	5.00	3.01	.27
Conformity	5.43	1.57	6.00	2.60	.98
Authority Relations	7.61	1.89	7.16	2.19	.80
Control of Aggression	6.92	2.04	7.04	2.34	.19
AFFECTIVE RELATIONSHIPS (AR)					
Liking Others	7.46	1.90	8.08	2.14	1.11
Social Acceptance	5.54	2.25	6.36	2.41	1.29
Being Liked	6.93	1.64	7.08	2.27	.28
Popularity	4.64	1.83	5.00	2.52	.60
IPA	18.64	3.84	19.88	7.13	.80
SI	25.14	3.67	25.20	6.27	.04
AR	24.57	4.41	26.52	7.55	1.16
TOTAL	68.36	9.19	71.60	17.68	.85

TABLE 10

PEER RATING SCALE: Non OH sample, 2 vs. 3 page groups

	2-page		3-page		
INDIVIDUAL	OH (N=120)		Non OH (N=189)		t
PROSOCIAL ACTION (IPA)	$\bar{X}$	S.D.	$\bar{X}$	S.D.	
Leadership	3.43	1.97	3.44	2.43	.02
Independence	5.59	2.10	5.68	2.79	.29
Assertiveness	4.33	2.54	4.28	2.54	.17
Competitiveness	5.32	2.00	5.33	2.38	.06
SOCIAL INTERACTION (SI)					
Cooperation	5.69	2.19	5.92	2.59	.80
Conformity	6.26	2.04	6.27	2.29	.04
Authority Relations	6.40	2.48	6.47	2.54	.22
Control of Aggression	5.90	2.47	6.18	2.57	.95
AFFECTIVE RELATIONSHIPS (AR)					
Liking Others	7.05	1.93	6.96	2.25	.37
Social Acceptance	7.37	2.26	7.62	2.27	.95
Being Liked	7.00	2.04	6.94	2.58	.21
Popularity	4.34	2.02	4.72	2.63	1.34
IPA	18.67	6.01	18.72	6.84	.08
SI	24.25	7.23	24.84	7.22	.70
AR	25.76	6.37	26.24	7.58	.58
TOTAL	68.68	16.39	69.80	18.20	.55

TABLE 11

PEER RATING SCALE: Full Sample, 2 vs. 3 page groups

INDIVIDUAL	3-page (N=149)		2-page (N=214)		t
PROSOCIAL ACTION (IPA)	$\bar{X}$	S.D.	$\bar{X}$	S.D.	
Leadership	3.36	2.31	3.40	2.47	.18
Independence	5.95	2.84	5.92	2.78	.78
Assertiveness	4.37	3.01	4.33	2.56	.13
Competitiveness	5.58	3.00	5.41	2.45	.60
SOCIAL INTERACTION (SI)					
Cooperation	5.73	2.69	5.81	2.65	.29
Conformity	6.30	3.08	6.24	2.32	.20
Authority Relations	6.80	3.18	6.55	2.51	.84
Control of Aggression	6.27	3.21	6.28	2.55	.04
AFFECTIVE RELATIONSHIPS (AR)					
Liking Others	7.28	2.68	7.09	2.26	.74
Social Acceptance	7.19	3.17	7.47	2.32	.96
Being Liked	7.17	2.96	6.96	2.54	.72
Popularity	4.60	3.07	4.75	2.61	.54
IPA	19.26	9.17	18.86	6.87	.47
SI	25.09	10.62	24.88	7.10	.23
AR	26.23	10.47	26.27	7.56	.04
TOTAL	70.58	28.45	70.01	18.11	.23

TABLE 12

Intercorrelations Among PRS Factors

	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	IPA	SI	AR	TOTAL
I. INDIVIDUAL PROSOCIAL ACTION (IPA)																
1. Leadership		.31	.49	.40	.46	.37	.34	.23	.46	.43	.46	.52	.72	.44	.46	.63
2. Independence			.29	.43	.48	.38	.51	.50	.31	.40	.42	.39	.70	.59	.46	.64
3. Assertiveness				.47	.43	.38	.43	.18	.47	.39	.37	.40	.76	.45	.49	.62
4. Competitiveness					.46	.48	.48	.41	.46	.39	.46	.44	.78	.52	.53	.69
II. SOCIAL INTERACTION (SI)																
5. Cooperation						.48	.55	.47	.52	.48	.54	.56	.62	.78	.66	.77
6. Conformity							.53	.49	.49	.56	.52	.52	.54	.78	.63	.73
7. Authority Relations								.52	.44	.44	.53	.43	.60	.82	.56	.73
8. Control of Aggression									.41	.47	.50	.46	.45	.79	.56	.67
III. AFFECTIVE RELATIONSHIPS (AR)																
9. Liking Others										.53	.58	.58	.57	.59	.79	.73
10. Social Acceptance											.60	.54	.55	.64	.80	.74
11. Being Liked												.69	.57	.65	.87	.78
12. Popularity													.59	.62	.85	.77
IPA														.69	.69	.87
SI															.75	.91
AR																.91

TABLE 13

PEER RATING SCALE: total sample,

OH vs. Non OH groups

INDIVIDUAL	OH (N=54)		Non OH (N=309)		t
PROSOCIAL ACTION (IPA)	$\bar{X}$	S.D.	$\bar{X}$	S.D.	
Leadership	3.07	3.12	3.44	2.26	1.02
Independence	6.80	3.88	5.64	2.54	2.81 +
Assertiveness	4.65	3.74	4.30	2.54	.87
Competitiveness	6.33	4.38	5.33	2.24	2.56 +
SOCIAL INTERACTION (SI)					
Cooperation	5.48	3.71	5.83	2.44	.89
Confirmity	6.24	4.51	6.27	2.19	.06
Authority Relations	7.85	3.91	6.44	2.51	3.47 ±
Control of Aggression	7.44	4.02	6.07	2.53	3.33 ±
AFFECTIVE RELATIONSHIPS (AR)					
Liking Others	8.17	3.63	7.00	2.13	3.31 ±
Social Acceptance	6.43	4.36	7.52	2.27	2.77 +
Being Liked	7.50	4.15	6.96	2.38	1.34
Popularity	5.33	4.40	4.57	2.42	1.84
IPA	20.85	13.17	18.70	6.52	1.85
SI	27.02	14.49	24.61	7.22	1.88
AR	27.43	15.46	26.05	7.13	1.05
TOTAL	75.30	42.04	69.36	17.50	1.76

$^{*}p \leq .05$ $^{+}p \leq .01$ $^{\pm}p \leq .001$

Table 14

Comparisons Between OH and Non-OH Group on Academic Folder Data

	OH		Non-OH		t
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	
Quarter Grade	2.78	1.05	2.12	1.32	2.45*
	N's (27)		(130)		
Semester Grade	2.66	1.08	2.08	1.22	2.35*
	N's (29)		(128)		
Days Absent (Semester)	5.26	3.80	8.93	8.45	2.21*
	N's (27)		(136)		
Discipline Referrals (Sem.)	.13	.57	.87	1.48	2.68+
	N's (30)		(148)		
Attendance Referrals (Sem.)	.10	.31	.28	.65	1.51
	N's (30)		(148)		
Vocational Referrals (Sem.)	.13		.01	.08	3.97±
	N's (30)		(148)		
Failure Notices (Sem.)	0		.15	.46	1.78
	N's (30)		(148)		
Reading Total	6.49	2.71	6.65	2.80	.50
	N's (28)		(100)		
Math Total	4.69	1.61	8.33	2.61	6.83
	N's (27)		(81)		

* $p < .05$
\+ $p < .01$
± $p < .001$

Table 15

Non Parametric Analyses on Proficiency Exam Performance

		Pass	Fail	
Reading Proficiency	OH	12	10	N=22
	Non-OH	121	24	N=145
		$X^2_{(1)} = 8.14$	$p \leq .004$	
Writing Proficiency	OH	14	7	N=21
	Non-OH	106	39	N=145
		$X^2_{(1)} = .13$	$p \leq .72$	
Math Proficiency	OH	11	7	N=18
	Non-OH	111	31	N=142
		$X^2_{(1)} = 1.71$	$p \leq .19$	

TABLE 16

Factor Means and Standard Deviations:

Teacher Questionnaire

(N = 34)

Section I: Perceptions and Attitudes toward MS		
Training/Preparation	$\bar{X}$ = 2.85	S.D. = .98
Resources Available	$\bar{X}$ = 2.65	S.D. = .86
General Attitudes	$\bar{X}$ = 4.04	S.D. = .73
Reactions of Participants	$\bar{X}$ = 3.46	S.D. = .68
Expectations of OH Youngsters	$\bar{X}$ = 4.49	S.D. = .63
Section II: Behavioral Observations of OH Youngsters		
Self Concept	$\bar{X}$ = 2.96	S.D. = 1.05
Social Interactions	$\bar{X}$ = 3.61	S.D. = .72
Acting Out	$\bar{X}$ = 4.01	S.D. = .83
Independence	$\bar{X}$ = 3.36	S.D. = .93
Assertiveness	$\bar{X}$ = 3.42	S.D. = .92

Table 17

Differences Between Parents of OH and Non-OH Youngsters on Questionnaire Factors

I. Perceptions & Attitudes Toward Mainstreaming.

	Parents of OH (N=12)		Parents of Non-OH (N-22)		
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	t
A. General Attitudes	48.42	10.60	43.14	11.74	1.29
B. Reactions of Participants	11.50	1.88	9.77	2.83	1.89
C. Expectations of OH Youngsters	11.92	1.93	12.14	3.33	.21
D. Resources Available	11.75	2.42	9.86	3.40	1.70

II. Behavioral Observations of Youngsters

A. Self Concept	11.25	2.45	11.91	2.35	.77
B. Social Interactions	18.00	3.89	19.45	2.69	1.29
C. Acting Out	12.00	3.25	11.18	3.26	.70
D. Independence	10.25	2.49	10.68	2.87	.44
E. Assertiveness	11.67	2.19	11.59	2.77	.08

Table 18

Differences Between Teachers and Parents on Questionnaire Factors

	Parents (N=34)		Teachers (N=34)		
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	t
I. Perceptions & Attitudes Toward Mainstreaming					
A. General Attitudes	3.75	.96	4.04	.73	1.40
B. Reactions of Participants	3.46	.88	3.46	.68	.00
C. Expectations of OH Youngsters	4.02	.96	4.49	.63	2.39*
D. Resources Available	3.51	1.06	3.09	1.00	1.68
II. Behavioral Observations of Youngsters					
A. Self Concept	3.89	.79	2.96	1.05	4.12 ±
B. Social Interactions	3.79	.64	3.61	.72	1.09
C. Acting Out	3.82	1.08	4.01	.83	.81
D. Independence	3.51	.90	3.36	.93	.67
E. Assertiveness	3.87	.85	3.42	.92	2.10*

* $p \leq .05$

+ $p \leq .01$

± $p \leq .001$

Table 19

Quantifiable Data Description
(Retrospective Questionnaire)

No. of	$\bar{X}$		# of responses
1	1.35	.48	
2	2.3	1.41	
2 a.			2
b.			2
3	3.2	1.28	
3 a.			11
b.			1
c.			12
d.			2
4	2.8	1.54	
5 a.	1.25	.55	
b.	1.45	.60	
6 a.	1.25	.44	
b.	1.65	.98	

Table 20

Open-Ended Questions: Percentage of Responses by Summary Categories

Question #	- Response Category - a	b	c	d	e	
1.	20	45	10	5	20	%'s
2.	30	20	20	20	10	
3.	20	40	30	10		
4.	40	20	35	5		
5.	25	45	0	30		
7.	50	0	25	25		
6.	30	20	35	15		
8.	30	10	45	15		
9.	50	25	25			
10.	40	35	25			

APPENDIX A

Class Environment Scale:

1. Instructions for Administration
2. Copy of Instrument
3. Factor Structure

Instructions - CES

There are 30 statements in this next section. They are statements about high school classrooms. You are to decide which of these statements are true of your classroom and which are false. If you think a statement is true or mostly true of your class, make an X in the column labeled true. If you think the statement is false, or mostly false, make an X in the column labeled false.

CLASSROOM ENVIRONMENT SCALE

True	False		
____	____	1.	Students put a lot on energy into what they do here.
____	____	2.	Students in this class get to know each other really well.
____	____	3.	This teacher spends very little time just talking with students.
____	____	4.	Students daydream a lot in this class.
____	____	5.	Students in this class aren't very interested in getting to know other students.
____	____	6.	The teacher takes a personal interest in students.
____	____	7.	Students are often "clock-watching" in this class.
____	____	8.	A lot of friendships have been made in this class.
____	____	9.	The teacher is more like a friend than an authority.
____	____	10.	Most students in this class really pay attention to what the teacher is saying.
____	____	11.	It's easy to get a group together for a project.
____	____	12.	The teacher goes out of his/her way to help students.
____	____	13.	Very few students take part in class discussions or activities.
____	____	14.	Students enjoy working together on projects in this class.
____	____	15.	Sometimes the teacher embarrasses students for not knowing the right answer.
____	____	16.	A lot of students "doodle" or pass notes.
____	____	17.	Students enjoy helping each other with homework.
____	____	18.	This teacher "talks down" to students.
____	____	19.	Students sometimes present something they've worked on to the class.
____	____	20.	Students don't have much of a chance to get to know each other in this class.
____	____	21.	If students want to talk about something this teacher will find time to do it.
____	____	22.	A lot of students seem to be only half awake during this class.
____	____	23.	It takes a long time to get to know everybody by his first name in class.
____	____	24.	This teacher wants to know what students themselves want to learn about.

CLASSROOM ENVIRONMENT SCALE - (continued)

True	False		
____	____	25.	Students sometimes do extra work on their own in this class.
____	____	26.	There are groups of students who don't get along in this class.
____	____	27.	This teacher does not trust students.
____	____	28.	Students really enjoy this class.
____	____	29.	Some students in this class don't like each other.
____	____	30.	Students have to watch what they say in this class.

CLASSROOM ENVIRONMENT SCALE (CES)

Factor Structure

I.	Involvement (10 Items)	1, 4, 7, 10, 13, 16, 19, 22, 25, 28.
II.	Affiliation (10 Items)	2, 5, 8, 11, 14, 17, 20, 23, 26, 29.
III.	Teacher Support (10 Items)	3, 6, 9, 12, 15, 18, 21, 24, 27, 30.
		30 Items (total)

APPENDIX B

Self Esteem Inventory

1. Copy of Measure

2. Factor Structure

SELF-ESTEEM INVENTORY
(SEI)

Please mark each statement in the following way:

If the statement describes how you usually feel, put a check (X) in the column, "Like Me."

If the statement does not describe how you usually feel, put a check (X) in the column, "Unlike Me."

		Like Me	Unlike Me
1.	I spend a lot of time daydreaming.		
2.	I'm pretty sure of myself.		
3.	I'm easy to like.		
4.	My parents and I have a lot of fun together.		
5.	I find it very hard to talk in front of the class.		
6.	I wish I were younger.		
7.	There are lots of things about myself I'd change if I could.		
8.	I can make up my mind without too much trouble.		
9.	I'm a lot of fun to be with.		
10.	I get upset easily at home.		
11.	I'm proud of my school work.		
12.	Someone usually has to tell me what to do.		
13.	It takes me a long time to get used to anything new.		
14.	I'm often sorry for the things I do.		
15.	I'm popular with kids my own age.		
16.	My parents usually consider my feelings.		
17.	I'm doing the best work that I can.		
18.	I give in very easily.		
19.	I can usually take care of myself.		
20.	I'm pretty happy.		
21.	My parents expect too much of me.		
22.	I like to be called on in class.		
23.	I understand myself.		
24.	Things are all mixed up in my life.		
25.	Kids usually follow my ideas.		
26.	No one pays much attention to me at home.		
27.	I'm not doing as well in school as I'd like to.		
28.	I can make up my mind and stick to it.		

		Like Me	Unlike Me
29.	I have a low opinion of myself.	_____	_____
30.	I don't like to be with other people my age.	_____	_____
31.	There are many times when I'd like to leave home.	_____	_____
32.	I'm rarely shy.	_____	_____
33.	I often feel upset in school.	_____	_____
34.	I often feel ashamed of myself.	_____	_____
35.	I'm not as nice looking as most people my age.	_____	_____
36.	If I have something to say, I usually say it.	_____	_____
37.	Kids pick on me very often.	_____	_____
38.	My parents understand me.	_____	_____
39.	My teacher makes me feel I'm not good enough.	_____	_____
40.	I'm a failure.	_____	_____
41.	I get upset easily when I'm scolded.	_____	_____
42.	Most people my age are better liked than I am.	_____	_____
43.	I usually feel as if my parents are pushing me.	_____	_____
44.	I often get discouraged in school.	_____	_____
45.	I can't be depended on.	_____	_____

SELF-ESTEEM Inventory (SEI): Factor Structure

I. General Aspects of Self-Esteem - (14 items)
1, 2, 3, 6, 7, 9, 14, 20, 23, 24, 29, 34, 40, 45.

II. Parents/Home - (9 items)
4, 10, 16, 21, 26, 31, 38, 41, 43.

III. Peers - (8 items)
5, 15, 25, 30, 32, 35, 37, 42.

IV. Assertiveness - (7 items)
8, 12, 13, 18, 19, 28, 36.

V. School/Work - (7 items)
11, 17, 22, 27, 33, 39, 44.

45 Items (total)

APPENDIX C

Peer Rating Scale

1. Copy of Scale
2. Factor Structure
3. Directions for Test Administrator

100

HOW I FEEL ABOUT SOME

OF MY CLASSMATES

Name _____

School _____

Grade _____

EXAMPLE:

THINK ABOUT→ Your best friend

1. Does your friend like to go to the movies?
Yes No Sometimes

(Put a circle around your answer)

THINK ABOUT→

1. If this student wants to do something, do the other students follow? Yes No Sometimes
2. Does this student help other youngsters in the class? Yes No Sometimes
3. Does this student say nice things about other students? Yes No Sometimes
4. Does this student speak up and give ideas? Yes No Sometimes
5. Does this student follow the class rules? Yes No Sometimes
6. Do classmates let this student work with them in school? Yes No Sometimes
7. Does this student ask a question if something is not clear? Yes No Sometimes
8. When you work together in class, does this student do some of the work? Yes No Sometimes
9. Do other students in the class feel bad if this student is absent? Yes No Sometimes
10. Does this student keep trying to do things that are hard to do? Yes No Sometimes
11. Does this student keep quiet when mad? Yes No Sometimes
12. Do other students in the class say good things about this student? Yes No Sometimes
13. Does this student like to do class assignments without help from the teacher? Yes No Sometimes
14. Does this student do what the other students in the class want to do? Yes No Sometimes
15. Does this student laugh when something funny happens? Yes No Sometimes
16. Does this student like to do things without help from others? Yes No Sometimes
17. Does this student follow the teacher's rules? Yes No Sometimes
18. Will other students in the class let this student hang-out with them? Yes No Sometimes
19. Does this student behave well at school? Yes No Sometimes
20. Are other students in the class happy when this student walks into the class room? Yes No Sometimes

THINK ABOUT →

1. Is it easy for this student to talk in front of the class? Yes No Sometimes
2. Does this student go along if some other students in the class want to do something else? Yes No Sometimes
3. Do other students like to talk with this student at lunch? Yes No Sometimes
4. Does this student get really excited when he/she is getting a good grade in the class? Yes No Sometimes
5. Does this student act nice even when someone is mean? Yes No Sometimes
6. Does the teacher like this student? Yes No Sometimes
7. Does this student try hard to get good grades? Yes No Sometimes
8. Is this student good at working with other students in the class? Yes No Sometimes
9. Will other students let this student be in their group? Yes No Sometimes
10. If the teacher needs helpers does this student's hand go up fast? Yes No Sometimes
11. Does this student try to do things to help others do well in class? Yes No Sometimes
12. Does this student try to have a lot of friends? Yes No Sometimes
13. During class, does this student think of things to do without help? Yes No Sometimes
14. Would this student keep cool even though other students cheat on a test? Yes No Sometimes
15. Does this student smile a lot? Yes No Sometimes
16. Is this student good at starting a conversation? Yes No Sometimes
17. Does this student try to help the teacher? Yes No Sometimes
18. If there was an assignment to do a group project, would others choose this student to be in their group? Yes No Sometimes
19. Is this student a leader? Yes No Sometimes
20. Do other students in the class try to work with this student? Yes No Sometimes

THINK ABOUT →

1. Does this student like to organize activities? Yes No Sometimes
2. Does this student get along with the teacher? Yes No Sometimes
3. Does this student like a lot of other students in the class? Yes No Sometimes
4. Is this student quick at answering the teacher's questions? Yes No Sometimes
5. Does this student work well with others? Yes No Sometimes
6. Do other students in the class try to get this student to be their friend? Yes No Sometimes
7. Is this student able to work alone? Yes No Sometimes
8. Does this student go along with others in the class if they want to do something together? Yes No Sometimes
9. Do other students in the class smile at this student? Yes No Sometimes
10. Does this student like to work in class without asking other students for help? Yes No Sometimes
11. After losing a game would this student still like the person who won? Yes No Sometimes
12. Do other students in the class let this student walk with them? Yes No Sometimes
13. Does this student try hard to win in games? Yes No Sometimes
14. Does this student go along with what others want to do at a party? Yes No Sometimes
15. Do other students in the class like to talk with this student? Yes No Sometimes
16. Is it easy for this student to be the leader in class? Yes No Sometimes
17. Does this student stay out of fights? Yes No Sometimes
18. Will other students in the class let this student get into a group conversation? Yes No Sometimes
19. Does this student try to do things better than the other students in the class? Yes No Sometimes
20. Is this student good at talking to the teacher? Yes No Sometimes

PEER RATING SCALE

Factor Structure

		Items
I.	Individual Prosocial Action (20 Items)	
	Leadership	1, 36, 39, 41, 56
	Independence	13, 16, 33, 47, 50
	Assertiveness	4, 7, 21, 30, 44
	Competitiveness	10, 24, 27, 53, 59
II.	Social Interaction (20 Items)	
	Cooperation	2, 8, 28, 31, 45
	Conformity	5, 14, 22, 48, 54
	Authority Relations	17, 19, 37, 42, 60
	Control of Aggression	11, 25, 34, 51, 57
III.	Affective Relationships (20 Items)	
	Liking Others	3, 15, 32, 35, 43
	Social Acceptance	6, 18, 29, 52, 58
	Being Liked	12, 23, 26, 49, 55
	Popularity	9, 20, 38, 40, 46
		60 Items (total)

PEER RATING SCALES (PRS)

Directions for Test Administrator

Grades 9 - 12

Testing Conditions

Before handing out the booklets:

1. Encourage the teacher to remain in the classroom. Provide the teacher with a copy of the rating scale.

2. Record the time at which you begin.

3. Be sure that the students are not sitting too close together. If necessary (and possible), have the students move their desks apart.

4. Make sure that each student has a pencil and an eraser.

5. "TODAY I AM GOING TO ASK YOU SOME QUESTIONS ABOUT SOME OF THE OTHER STUDENTS IN YOUR CLASS. WE ARE DOING A SURVEY TO FIND OUT HOW WELL HIGH SCHOOL STUDENTS GET TO KNOW EACH OTHER IN DIFFERENT CLASSES. THIS IS A WAY OF FINDING OUT HOW WELL YOU KNOW THE OTHER STUDENTS IN YOUR CLASS. THIS WILL NOT AFFECT YOUR CLASS GRADE. YOUR TEACHER WILL NOT SEE YOUR ANSWERS.

   WE WOULD GREATLY APPRECIATE YOUR HELP, BUT YOU DO NOT HAVE TO COMPLETE THESE QUESTIONNAIRES IF YOU DON"T WANT TO. MAKE SURE THAT NO ONE ELSE SEES YOUR PAPER. DO NOT LOOK AT ANYONE ELSE'S PAPER, AND PLEASE DO NOT TALK ABOUT YOUR ANSWERS. DO NOT TELL ANYONE ELSE THE NAMES OF THE PEOPLE YOU WROTE ABOUT."

6. "NOW I WILL GIVE EACH OF YOU A BOOKLET. DON'T OPEN THE BOOKLET OR MAKE ANY MARKS ON IT UNTIL YOU ARE TOLD".

7. Pass out booklets. Call names and take to child.

   Note: If there is an unexpected absence, note it on the student's booklet. If there is an unexpected presence, prepare a spare booklet by printing randomly chosen classmates' names on the answer pages. Put a distinguishing check mark in the upper right corner of the cover page, and then hand out the booklet.

8. YOUR NAME AND CLASS ARE ON THE FRONT PAGE OF THE BOOKLET. CORRECT YOUR NAME AND GRADE IF EITHER IS INCORRECT. ADD IN YOUR GRADE IF IT IS NOT WRITTEN.

   "NOW A PRACTICE QUESTION. THINK ABOUT YOUR BEST FRIEND. YOUR FRIEND DOES NOT HAVE TO BE IN THIS CLASS, BUT IT IS O.K. IF YOUR FRIEND IS IN THIS ROOM. NOW I AM GOING TO ASK YOU A COUPLE OF QUESTIONS ABOUT YOUR FRIEND. FIND QUESTION I. DID YOU ALL FIND IT? NOW I'LL READ THE QUESTION. DOES YOUR FRIEND LIKE TO GO TO THE MOVIES? IF YOUR FRIEND DOES LIKE TO GO TO THE MOVIES: YOU SHOULD PUT A CIRCLE AROUND THE WORD "YES". IF YOUR FRIEND DOES NOT LIKE TO, YOU SHOULD PUT A

CIRCLE AROUND THE WORD "NO". IF YOUR FRIEND SOMETIMES LIKES TO GO TO THE MOVIES, YOU SHOULD PUT A CIRCLE AROUND THE WORD "SOMETIMES". NOW PUT A CIRCLE AROUND THE WORD THAT TELLS ME IF YOUR FRIEND LIKES TO GO TO THE MOVIES. HAS EVERYONE MADE AN ANSWER? GOOD".

10. AT THE TOPS OF THE NEXT THREE PAGES WILL BE THE WORDS "THINK ABOUT" FOLLOWED BY THE NAME OF A PERSON IN THE CLASS. LOOK AT THE TOPS OF THESE PAGES, BUT DON'T CALL OUT ANY NAMES OR SHOW YOUR PAPER TO ANYONE. IF YOU DON'T KNOW ONE OR MORE OF THE THREE PEOPLE WHOSE NAMES ARE ON YOUR PAPERS, RAISE YOUR HAND NOW.

10. A. (OPTIONAL) YOUR TEACHER WILL NOW CALL THE ROLL. RAISE YOUR HAND WHEN YOUR NAME IS CALLED AND WATCH AS THE NAMES ON YOUR PAPER ARE CALLED. DO NOT CALL OUT OR POINT TO ANYONE.

11. "NOW TURN TO THE NEXT PAGE. AT THE TOP OF THE PAGE IT SAYS "THINK ABOUT", AND THEN THE NAME OF ONE OF THE STUDENTS IN YOUR ROOM HAS BEEN PRINTED. AGAIN, DON'T CALL OUT OR POINT TO ANYONE. THIS IS THE STUDENT YOU SHOULD THINK ABOUT WHEN ANSWERING THE QUESTIONS THAT I READ TO YOU, ON THE FRONT PAGE. CAN EVERYONE READ THE NAME OF THE STUDENT WHO YOU ARE SUPPOSED TO THINK ABOUT? IF YOU STILL DON'T KNOW THE PERSON AT ALL, LEAVE THE PAGE BLANK. IF YOU ONLY KNOW THE PERSON A LITTLE, ANSWER THE QUESTIONS YOU CAN.

12. "I WILL READ EACH QUESTION FOR YOU AND THEN YOU SHOULD ANSWER BY MAKING A CIRCLE AROUND EITHER "YES" "NO" OR "SOMETIMES". REMEMBER THAT YOUR ANSWERS SHOULD TELL HOW YOU THINK THE PERSON REALLY IS, NOT HOW MUCH YOU LIKE OR DON'T LIKE THER PERSON. LISTEN CAREFULLY HERE IS THE FIRST QUESTION".

13.(Read questions 1 - 20)

14. "NOW WE ARE FINISHED WITH THE FIRST PAGE. TURN TO THE NEXT PAGE. AT THE TOP OF THE PAGE, NEXT TO THE WORDS "THINK ABOUT" IS THE NAME OF ANOTHER STUDENT IN YOUR CLASS. NOTICE THAT THIS IS A DIFFERENT NAME. CAN EVERYONE READ THE NAME YOU ARE TO THINK ABOUT NOW? (pause) IF YOU DO NOT KNOW WHO YOU ARE SUPPOSED TO THINK ABOUT NOW, THEN LEAVE THE PAGE BLANK. REMEMBER TO THINK ABOUT THE PERSON NAMED AT THE TOP OF YOUR PAGE. HERE IS THE NEXT QUESTION".

15. (Read questions 1-20 on page 2. Be sure you are on page 2).

16. "NOW WE ARE FINSIHED WITH THE SECOND PAGE. PLEASE TURN TO THE NEXT PAGE. AT THE TOP OF THE PAGE IS THE NAME OF ANOTHER STUDENT IN YOUR CLASS. NOTICE THAT THIS IS A DIFFERENT NAME. CAN EVERYONE READ THE NAME AT THE TOP OF YOUR PAGE? (pause) IF YOU DO NOT KNOW WHO YOU ARE TO THINK ABOUT NOW LEAVE THE PAGE BLANK. REMEMBER TO THINK ABOUT THE STUDENT AT THE TOP OF YOUR PAGE. HERE IS THE NEXT QUESTION.

17. (Read questions 1-20 on page 3. Be sure you are on page 3).

18. "NOW WE ARE FINISHED. TURN YOUR BOOKLETS OVER AND THEY WILL BE COLLECTED. PLEASE REMEMBER TO KEEP YOUR ANSWERS A SECRET. THANK

YOU FOR TELLING ME HOW YOU FEEL ABOUT SOME OF YOUR CLASSMATES. I HOPE THAT YOU GET TO KNOW THE STUDENTS IN YOUR CLASS BETTER BECAUSE OF THESE QUESTIONS.

19. Before leaving the classroom, record your finishing time. Also count the booklets to be sure you have them all. When you leave the room, record any unusual incidents or problems.

APPENDIX D

Academic Folder Data

Retrieval Form

Student's Name _____ School _____

Grade _____ Class(es) Surveyed _____

Code # _____

Fall 1980: Semester Grades

		Grade
Class 1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____

Fall 1980: Attendance

Days Absent: _____ (Total Days: _____)

Fall 1980 "Special" referrals: (e.g., discipline referrals, guidance, special counseling, etc.)

List any, in brief descriptive terms:

1. _____
2. _____
3. _____

Most recent Standardized Achievement Test Scores

1.) CTBS

Raw Scores	_____	_____
Grade Level	_____	_____
% Ranking	_____	_____

2.) Proficiency Exam

Reading	_____
Writing	_____
Arithmetic	_____

APPENDIX E

Teacher Questionnaire

1. Solicitation Letter
2. Copy of Questionnaire
3. Factor Structure

WCIL

self Assurance
community Acceptance
unlimited Access

Spring 1981

Dear Teacher:

We would like to enlist your help in conducting a research project studying the social adjustment of orthopedically handicapped youngsters in "mainstreamed" classrooms. For the purposes of this study, these classes refer to those having one or more students with an orthopedic disability such as cerebral palsy, muscular dystrophy and spina bifida. Since the passage of Public Law 94-142, youngsters with such disabilities have been ushered into "regular" classrooms as a matter of policy. Our study aims to find out more about how these youngsters fare in this social environment; are they accepted by their peers, do they feel like important members of their class, how comfortable do they feel in this social climate.

Our findings should bring much needed "hard" data into the mainstreaming movement and could, potentially, direct the efforts of others to help mainstreamed students get the most out of their educational experience.

For a $5.00 honorarium, we would very much appreciate your candid opinions on a series of questions regarding mainstreaming. The questions appear on the attached questionnaire (instructions are found right on the questionnaire).

Please take a few minutes of your time (most people finish the questionnaire within 15-20 minutes) to give us your opinions. Your name is not needed on the forms, nor will this information be used to communicate anything about you or your class. The information you give us will be combined with that provided by <u>other</u> teachers; so please, be assured that anonymity will be maintained.

Thank you,

WESTSIDE COMMUNITY FOR INDEPENDENT LIVING
(WCIL

If you have any questions about our study or the questionnaire as you're filling it out, please contact:

1. Jan Watson
   Bassett High School
   OH Department
   (213) 33305251 Ext. 282

2. Linda Tonsing
   Westside Community for
   Independent Living
   473-8421

When finished . . . Please drop the completed questionnaire in Jan Watson's mailbox. Also, give us your name and address on the attached 3 x 5 card so we can mail you the $5.00 honorarium (this way your responses stay totally anonymous).

Westside Community for Independent Living, Inc.
11687 National Blvd. • Los Angeles, CA 90064
(213) 473-8421 • TTY (213) 477-5306

TEACHER QUESTIONNAIRE

1. Position: _____ (e.g., regular class teacher, administrator, special ed., etc.)

2. Sex: Female ___ Male ___ 3. Age ___ 4. Years experience in above position (at this or other settings: _____

5. Number of years of direct involvement in "mainstreamed classrooms: _____

6. Number of mainstreamed classrooms teaching currently: _____

7. Subject(s) you currently teach in mainstreamed classroom(s): _____

Below you will find a number of statements representing a variety of opinions on various aspects of the "mainstreamed" classrooms. Please use the following scale to indicate the extent to which you agree or disagree with each statement. Please, be sure to answer every item.

1	2	3	4	5
agree	agree somewhat	neither agree nor disagree	disagree somewhat	disagree

Circle the number that best represents your reaction to each of the statements that follow. Go through the questionnaire quickly, considering each statement carefully, yet without spending a lot of time on each item.

	agree	agree somewhat	neither agree nor disagree	disagree somewhat	disagree
	1	2	3	4	5
1. Teachers are generally made aware of any special needs orthopedically handicapped (OH) youngsters have . . .	1	2	3	4	5
2. There are not enough services offered to teachers for meeting the special needs of students with physical disabilities	1	2	3	4	5
3. Regular classroom teachers are well trained to under- and deal effectively with the physical needs of OH youngsters.	1	2	3	4	5
(a) with their social needs . .	1	2	3	4	5

	agree	agree somewhat	neither agree nor disagree	disagree somewhat	disagree
	1	2	3	4	5
4. I feel well informed about the nature of the disabilities of the orthopedically handicapped (OH) youths I have in my classroom <u>now</u>.	1	2	3	4	5
5. For the most part, mainstreaming does more <u>harm</u> than good for:					
(a) OH students	1	2	3	4	5
(b) Non-handicapped students . .	1	2	3	4	5
(c) Teachers	1	2	3	4	5
6. I perceive a need for a "transitional" program which helps OH students get the most out of the mainstreaming experience, such as:					
(a) an assertiveness training program . .	1	2	3	4	5
(b) one strengthening their social skills .	1	2	3	4	5
(c) one strengthening problem solving skills	1	2	3	4	5
7. The parents of mainstreamed OH youngsters with whom I have come in contact, have generally been pleased with their children's experiences in such classrooms.	1	2	3	4	5
8. OH youngsters should be expected to meet the same academic standards as the other students in their classrooms.	1	2	3	4	5
9. "Mainstreaming" OH students is a sound idea which helps them to get the most from their school experience in terms of:					
(a) academic performance . . .	1	2	3	4	5
(b) social development	1	2	3	4	5
10. In my experience, OH students prefer special classes to those in which they are mainstreamed. . . .	1	2	3	4	5
11. Placing OH students in classrooms with non-handicapped peers creates discomfort for the non-handicapped peers.	1	2	3	4	5

	agree 1	agree somewhat 2	neither agree nor disagree 3	disagree somewhat 4	disagree 5
12. I perceive a need for a program to help non-handicapped students to examine their understanding and attitudes toward physical disabilities.	1	2	3	4	5
(a) I perceive a need for the same type of program for teachers.	1	2	3	4	5
13. It is a good idea to openly discuss an OH person's disability in the classroom.	1	2	3	4	5
14. There are sufficient special services offered to OH students for dealing with their physical disabilities	1	2	3	4	5
15. OH youngsters should be expected to conform to the same social standards of conduct as non-OH students. .	1	2	3	4	5
16. Non-OH students often wonder how best to relate to OH peers	1	2	3	4	5
17. OH youngsters should try as hard to achieve as all other students.	1	2	3	4	5

Listed below you will find a number of statements describing behaviors you may have observed within a mainstreamed classroom. Based on your experiences with such classes, please use the same five-point scale to represent the entent of your agreement or disagreement with each statement.

1. OH youngsters tend to underestimate their academic abilities.	1	2	3	4	5
2. Compared with non-handicapped students at the same grade level, handicapped (OH) students tend to:					
(a) monopolize conversations more often . .	1	2	3	4	5
(b) engage in conversations more easily . .	1	2	3	4	5
(c) have a harder time staying with the topic of conversation.	1	2	3	4	5
3. Again, compared with all non-OH youths at their grade level, OH students tend to:					
(a) act "sillier" in class	1	2	3	4	5
(b) show as much sensitivity to feelings of others	1	2	3	4	5

	agree	agree somewhat	neither agree nor disagree	disagree somewhat	disagree
	1	2	3	4	5
(Question No. 3 continued)					
(c) ask the teacher's permission for things others do independently	1	2	3	4	5
(d) "act-out" and draw attention to themselves inappropriately more often . . .	1	2	3	4	5
4. OH youngsters tend to solve their social problems as well as their non-handicapped peers do . . .	1	2	3	4	5
5. OH students tend to over-estimate their academic abilities.	1	2	3	4	5
6. When compared with all other non-OH students at their grade level, OH students:					
(a) seem more withdrawn	1	2	3	4	5
(b) volunteer answers in class as much as anyone else	1	2	3	4	5
(c) ask for the teacher's help when and if needed as much as any other student. .	1	2	3	4	5
7. Again, relative to their non-OH classmates, OH students:					
(a) don't get into quarrels with other students as often	1	2	3	4	5
(b) demand an excessive amount of the teacher's help	1	2	3	4	5
8. From what I have observed, OH youngsters have as satisfying a set of social relationships as their classmates.	1	2	3	4	5
9. When compared with all the non-OH students at their grade level, OH students:					
(a) request an undue amount of privileges . .	1	2	3	4	5
(b) achieve close to their potential . . .	1	2	3	4	5
10. OH youngsters tend to get teased more often . . .	1	2	3	4	5
11. OH youngsters tend to get taken advantage of more often than their non-OH classmates	1	2	3	4	5
12. OH students tend to have poorer self-concepts . . .	1	2	3	4	5
13. OH students tend to take advantage of their peers . . more than their non-OH classmates	1	2	3	4	5

TEACHER QUESTIONNAIRE

(Factor Structure)

Section I: Perceptions and Attitudes Toward Mainstreaming

	# of Items
A. Training/Preparation: 1, 3, 3a, 4	4
B. Resources Available: 2, 6a, 6b, 12, 12a, 14	6
C. General Attitudes Toward Mainstreaming: 5a, 5b, 5c, 9a, 9b, 13	6
D. Reactions of Participants: 7, 10, 11, 16	4
E. Expectations of OH Youngsters: 8, 15, 17	3
	23 Items

Section II: Behavioral Observations of OH Youngsters

A. Self Concept: 1, 6a, 9b, 12	4
B. Social Interactions: 2a, 2b, 2c, 3b, 8, 10	6
C. Acting Out: 3a, 3d, 5, 7a, 13	5
D. Independence: 3c, 6c, 7b, 9a	4
E. Assertiveness: 4, 6b, 11	3
	22 Items

45 Items Total

APPENDIX F

Parent Questionnaire

1. Solicitation Letters
   (English and Spanish)

2. Copies of Questionnaire
   (English and Spanish)

3. Factor Structure

Bassett Unified School District

904 N. Willow Avenue • La Puente • California 91746 • (213) 333-5251

May, 1981

Dear Parent:

We are a group of researchers working with your high school student's school, on a project funded by the State Department of Education. We are interested in your opinions as parents of handicapped or non-handicapped students, and we'd like to know your honest opinions about students in high school. If you help us by filling out the attached questionnaire, we will send you a $5.00 check for your time and effort.

Perhaps you've heard your son or daughter use the word "mainstreamed" in reference to their classes at school. By definition, a mainstreamed classroom is one in which one or more students with handicaps are placed with non-handicapped students. A regular classroom would consist of no handicapped students and a special classroom would contain all handicapped students. In our study, we are dealing with only orthopedic handicaps (i.e., cerebral palsy, spina bifida, muscular dystrophy, etc.) - in other words, handicaps which involve physical limitations of movement and mobility.

Your high school youngster is in a mainstreamed classroom. Please keep that youngster in mind when completing the questionnaire. Your name is not needed on the questionnaire. All information will remain anonymous and be used only for this specific project. Your decision to participate will not effect your child academically in any way.

When you've finished the questionnaire, please mail it within two weeks in the enclosed, self-addressed, stamped envelope. If you would like the $5.00 remuneration, please print your name and address on the small card enclosed, and include it with your completed questionnaire.

Thank you for your cooperation.

Cordially,

WESTSIDE CENTER FOR INDEPENDENT LIVING (WCIL)

If you have any questions about this study or the questionnaire contact:

Linda Tonsing - WCIL, (213) 473-8421 OR

Jan Watson - OH Department, (213) 333-5251, ext. 282.

Bassett Unified School District

904 N. Willow Avenue • La Puente • California 91746 • (213) 333-5251

Primavera, 1981

Queridos Padres:

Nosotros somos un grupo de Investigadores academicos trabajando en esta escuela de High School, en un proyecto pagado por bonos del Departamento de Educación de el Estado. Estamos interesado en sus opiniones como padres de jovenes con o sin incapacidades ortopédicas (IO). Si llena el cuestionario adjunto a lo presente y nos lo devuelve, les mandaremos $5.00 por su esfuerzo y tiempo.

Quizas usted ha oido su hijo/hija mencionar la frase "Adaptación Central", en referencia a sus clases en la escuela. Las clases consideradan Adaptacion Central son aquellas en cuales hay uno o mas estudiantes con alguna incapacidad ortopédica, y tambien estudiantes "regulares", es decir, sin alguna incapacidad. Una clase regular no tiene algun estudiante con una incapacidad ortopédica (IO), y las clases especiales tienen estudiantes con IO unicamente. En nuestro proyecto, estamos interesado unicamente en incapacidades ortopédicas (tal como; perlesía cerebral y distrofia muscular)- es decir, incapacidades que incluyen limitaciones de movimiento, mobilidad, y algun daño de la salud.

Su hijo/hija esta en una clase de Adaptación Central. Por favor, llene el cuestionario con ese hijo en mente. No necesitamos su nombre en el cuestionario. Toda la informacion que nos de quedará anónima y se usará unicamente en este proyecto. Su decision de participar no afectará a su niño en la escuela, de cualquier manera.

Cuando termine el cuestionario, por favor mándelo por correo en el sobre que le mandamos (no hará falta sellos). Si quiere los $5.00, denos su nombre y direccion en la carta que incluimos, y póngala con el cuestionario completo.

Por favor devuelva el cuestionario completado en las proximas dos semanas.

Muchas gracias por su cooperacion.

Cordialmente.

El Proyecto de la Adaptación Central
Westside Community for Independent Living

Si tiene alguna pregunta, por favor llame a:
Linda Tonsing - WCIL (213) 473-8421 or
Jan Watson - Bassett High School (213) 333-5251, ext. 282

PARENT QUESTIONNAIRE

1. Grade your high school child is in: _____

2. My child is: (check one)
   Orthopedically handicapped _____
   Not orthopedically handicapped _____

3. School your youngster attends: _____

4. Your relationship to student: _____
   (e.g., mother, father, guardian)

5. Your age: _____

6. Sex of your high school youngster: (check one) Male ____; Female ____.

7. Your sex: (check one) Male ____; Female ____.

8. Number of years your high school child has been in mainstreamed classes: _____.

9. Is your child enrolled in a Special Education program for youngsters with physical handicaps? Yes ____; No ____
   Please specify handicap: _____

Below you will find a number of statements representing different opinions on various aspects of the "mainstreamed" experience for high school students. Please use the following scale to indicate the extent to which you agree or disagree with each statement. Please, be sure to answer every item.

1	2	3	4	5
agree	agree somewhat	neither agree nor disagree	disagree	disagree somewhat

Circle the number that best represents your reaction to each of the statements that follow. Go through the questionnaire quickly, considering each statement carefully, yet without spending a lot of time on each item.

	agree	agree somewhat	neither agree nor disagree	disagree somewhat	disagree
	1	2	3	4	5
1. I am generally pleased about the academic progress my youngster has made in school	1	2	3	4	5

	agree	agree somewhat	neither agree nor disagree	disagree somewhat	disagree
	1	2	3	4	5
2. It is my belief that orthopedically handicapped (OH) students prefer special classes to those in which they are mainstreamed	1	2	3	4	5
3. For the most part, mainstreaming does more <u>harm</u> than good for:					
(a) OH students	1	2	3	4	5
(b) "regular" (i.e., non-handicapped) students . .	1	2	3	4	5
(c) teachers in mainstreamed classrooms	1	2	3	4	5
(d) parents of OH kids	1	2	3	4	5
(e) parents of non-OH kids	1	2	3	4	5
4. OH youngsters should be expected to meet the same academic standards as the other students in their "mainstreamed" classroom	1	2	3	4	5
5. Placing OH students in classrooms with non-handicapped classmates creates discomfort for the non-handicapped student	1	2	3	4	5
6. "Mainstreaming" OH students is a sound idea which helps them get the most from their school experience in terms of:					
(a) academic performance	1	2	3	4	5
(b) social development	1	2	3	4	5
7. I feel that a mainstreamed classroom is more responsive to the needs of an OH student than a Special-Ed classroom (where only youngsters with disabilities are taught) can be	1	2	3	4	5
8. The school has been attentive to any special needs my child has had	1	2	3	4	5
9. My youngster often comes home with complaints about what's going on in his/her "regular" (<u>not</u> Special-Ed) classrooms	1	2	3	4	5
10. It's better for all students when handicapped and non-handicapped students are in the same class . . .	1	2	3	4	5
11. I sometimes wonder if a mainstreamed classroom will cause problems for my son/daughter in his/her:					
(a) academic achievement	1	2	3	4	5
(b) social development	1	2	3	4	5

	agree	agree somewhat	neither agree nor disagree	disagree somewhat	disagree
	1	2	3	4	5
12. If my youngster has a "special" need, I know where in the community I can get assistance we might need .	1	2	3	4	5
13. The school is doing a good job of helping my youngster become as independent a person as possible . . .	1	2	3	4	5
14. OH youngsters should be expected to conform to the same social standards of conduct as non-OH students .	1	2	3	4	5
15. OH youngsters should try as hard to achieve as all other students	1	2	3	4	5

Listed below you will find a number of statements describing behaviors you may have observed in your youngster. Based on the way your child usually is, please use the same five point scale to represent the extent of your agreement or disagreement with each statement.

1. My son/daughter tends to have a good opinion of him/herself	1	2	3	4	5
2. My youngster tends to overestimate his/her academic ability	1	2	3	4	5
3. My child has a satisfying set of social relationships	1	2	3	4	5
4. My son/daughter has friends from school with whom she (or he) gets together frequently	1	2	3	4	5
5. My child tends to:					
(a) be withdrawn	1	2	3	4	5
(b) engage in conversations easily . . .	1	2	3	4	5
(c) be motivated to do well in school . .	1	2	3	4	5
6. My youngster tends to solve his/her own social problems	1	2	3	4	5
7. My son/daughter gets teased frequently by his/her classmates	1	2	3	4	5
8. My youngster is sometimes taken advantage of by his/her classmates	1	2	3	4	5

	agree	agree somewhat	neither agree nor disagree	disagree somewhat	disagree
	1	2	3	4	5
9. Sometimes my child asks permission to do things that she/he could do without asking . . .	1	2	3	4	5
10. My child is achieving close to his/her potential in school	1	2	3	4	5
11. My youngster gets into a lot of quarrels at school	1	2	3	4	5
12. My child regularly brings home some of her/his friends from school	1	2	3	4	5
13. My son/daughter tends to "act silly" for his/her age	1	2	3	4	5
14. My youngster rarely requires my help with things he/she is doing	1	2	3	4	5
15. My youngster goes about doing the things expected of him/her without much help from anyone	1	2	3	4	5

CUESTIONARIO DE LOS PADRES

1. Grado en cual esta su joven de High School: _____

2. Mi hijo/hijoa tiene una incapacidad ortopédica: Si____
   No____ (marque uno)

3. Escuela a la cual va su joven?: _____

4. Su relación al estudiante?: _____
   (por ejemplo; padre, madre, guardia,etc.)

5. Su edad: _____

6. Sexo de su joven de High School: Varon_____ Hembra_____ (marque uno)

7. El sexo suyo: (marque uno) Hombre_____ Mujer_____

8. Numero de anos que su joven a estado en clases de Adaptación Central: _____

9. Esta su hijo/hija registrado en un programa de Educacion Espccial para jovenes con incapacidades ortopédicas?: Si____ No_____

   Por favor, especifique la incapacidad: _____

Abajo encontrará varias declaraciones que representan distintas opiniones sobre varios aspectos de la Adaptación Central de estudiantes en High School. Por favor,use la escala presentada para indicar si está o no está de acuerdo con cada declaración. Conteste cada pregunta, por favor.

1	2	3	4	5
de acuerdo	un poco de acuerdo	sin opinion	un poco en desacuerdo	no estoy de acuerdo

Ponga un <u>circulo</u> alrededor de el numero que mejor represente su reacción a cada de las declaraciones que siguen. Llene el cuestionario rapidamente, considerando cada declaracion con cuidado, pero sin tomar mucho tiempo en cada respuesta.

	de acuerdo 1	un poco de acuerdo 2	sin opinion 3	un poco en desacuerdo 4	no estoy de acuerdo 5
1. En general, estoy satisfecho con el progreso académico que ha logrado mi hijo en la escuela.	1	2	3	4	5
2. Yo creo que jovenes con incapacidades ortopédicas prefieren clases para ellos, a las clases de la Adaptación Central.	1	2	3	4	4

	de acuerdo 1	un poco de acuerdo 2	sin opinion 3	un poco en desacuerdo 4	no estoy de acuerdo 5
3. Por la mayor parte, la Adaptación Central le hace mas daño que bien a los:					
a. estudiantes con incapacidades ortopédicas. . .	1	2	3	4	5
b. estudiantes "regulares" (sin incapacidad). . .	1	2	3	4	5
c. maestros en clases de Adaptación Central. . . .	1	2	3	4	5
d. padres de hijos con incapacidades.	1	2	3	4	5
e. padres de hijos sin incapacidades.	1	2	3	4	5
4. Se debe esperar lo mismo, academicamente, de los jovenes con incapacidades que de cualqier otros.	1	2	3	4	5
5. Poniendo a estudiantes con incapacidades ortopédicas en las mismas clases con otros sin esas incapacidades, resulta en incomodidades para los estudiantes sin incapacidad.	1	2	3	4	5
6. La Adaptación Central es una buena idea que ayuda que los jovenes con IO reciban lo maximo de su educacion, en terminos de:					
a. actuación academica.	1	2	3	4	5
b. desarrollo social.	1	2	3	4	5
7. Yo creo que una clase de Adaptación Central responde mejor a las necesidades de los estudiantes con incapacidades ortopédicas que una clase de Educacion Especial (en la cual solo hay estudiantes con IO).	1	2	3	4	5
8. La escuela ha sido atenta a cualquiera necesidad especial que mi niño ha tenido.	1	2	3	4	5
9. Mi joven regresa al hogar de amenudo con quejas de lo que esta pasando en sus clases regulares (no las de educacion especial).	1	2	3	4	5
10. Es mejor que los jovenes con y sin IO esten en la misma clase.	1	2	3	4	5
11. Algunas veces me pregunto si la Adaptación Central causará problemas para mi hijo ~~en~~ su:					
a. realización académica.	1	2	3	4	5
b. desarrollo social.	1	2	3	4	5
12. Si mi hijo tiene una necesidad especial, yo se donde puedo conseguir la ayuda que necesito.	1	2	3	4	5

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	de acuerdo 1	un poco de acuerdo 2	sin opinion 3	un poco en desacuerdo 4	no estoy de acuerdo 5
13. La escuela esta haciendo una buena hobra ayudando a que mi hijo se convierta lo mas independiente posible. .	1	2	3	4	5
14. Los estiduantes con IO deben adaptarse a las exigencias sociales tal como los otros jovenes.	1	2	3	4	5
15. Los jovenes con IO deben de tratar de suceder tanto como los otros.	1	2	3	4	5

Abajo encontrará otras declaraciones que describen ciertos modos de ser que usted puede haber visto en su joven. Básese en la manera que su joven actua normalmente, y use la misma escala de 5-puntos para indicar si esta de acuerdo o no con cada declaración

1. Mi hijo tiene una buena opinion de si mismo.	1	2	3	4	5
2. Mi hijo tiene la tendencia de exagerar sus abilidades académicas.	1	2	3	4	5
3. Mi hijo tiene varias amistades que le dan satisfaccion. .	1	2	3	4	5
4. Mi hijo tiene amistades de la escuela con quiene se reune frecuentemente.	1	2	3	4	5
5. Mi hijo tiene la tendencia de:					
a. actuar aislado.	1	2	3	4	5
b. entrar en conversaciones facilmente.	1	2	3	4	5
c. estar motivado para hacer bien en la escuela .	1	2	3	4	5
6. Normalmente, mi joven resuelve sus mismos problemas sociales.	1	2	3	4	5
7. A mi hijo lo fastidian frecuentemente en la escuela. . . .	1	2	3	4	5
8. A mi hijo algunas veces sus compañeros de clase le sacan la ventaja.	1	2	3	4	5
9. Algunas veces mi hijo pide permiso para hacer ciertas cosas que pudiera hacer sin preguntar.	1	2	3	4	5
10. Mi hijo esta aproximando su potencial en la escuela. . .	1	2	3	4	5
11. Mi joven se encuentra en muchos pleitos en la escuela.	1	2	3	4	5

	de acuerdo 1	un poco de acuerdo 2	sin opinion 3	un poco en desacuerdo 4	no estoy de acuerdo 5
12. Mi hijo regularmente trae sus amigos de la escuela a la casa.	1	2	3	4	5
13. Mi hijo tiene la tendencia de actuar "necio" para su edad.	1	2	3	4	5
14. Mi hijo necesita mi ayuda de rareza con las cosas que esta haciendo.	1	2	3	4	5
15. Mi hijo hace las cosas que se esperan de él sin mucha ayuda de nadie.	1	2	3	4	5

MUCHAS GRACIAS!

PARENT QUESTIONNAIRE

(Factor Structure)

I. Perception and Attitudes Toward Mainstreaming

	# of items
A. General Attitudes Toward Mainstreaming	
1, 3a, 3b, 3c, 3d, 3e, 6a, 6b, 7, 10, 11a, 11b	12
B. Reactions of Participants	
2, 5, 9	3
C. Expectations of OH Youngsters	
4, 14, 15	3
D. Resources Available	
8, 12, 13	3
	21

II. Behavioral Observations of Youngsters

A. Self Concept	
1, 5a, 10	3
B. Social Interactions	
3, 4, 5b, 7, 12	5
C. Acting Out	
2, 11, 13	3
D. Independence	
9, 14, 15	3
E. Assertiveness	
5c, 6, 8	3
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APPENDIX G

Retrospective Quentionnaire

1. Copy of Questionnaire
2. Summarization Categories

Graduate of Mainstreamed (MS) Classroom Survey

1. Age _____
2. Sex: Male ___; Female ___.
3. Date of graduation from high school: _____
4. Number of years spent in MS classrooms while in high school: _____
5. Number of MS classes taken, altogether, in high school: _____
6. Work: Full time _____; Part time _____.
7. Education: Full time _____; Part time _____.
8. Parenting: Yes ___; No ___.

We're interested in finding out more about the social-educational climate in Mainstreamed, high school classrooms. The information we're gathering through a number of means, should prove useful to teachers and other educators interested in providing the best possible learning situation for high school students, with and without orthopedic disabilities.

Your responses to the set of questions we've prepared will be very valuable to us in our study. Indeed, we are offering a $5 honorarium to those folks who are sharing their impressions of mainstreamed classrooms with us. Your responses will be kept strictly confidential.

1. How was the decision made for you to attend Mainstreamed classrooms? (as a probe: Did you ask to be enrolled in them, were you simply assigned, did that process change over the years?)

2. What do you recall most vividly about the Mainstreamed classrooms that you attended? (as a probe: Is there a particular incident that stands out in your mind? Were these classes in any way "different" from any of the other classes you took?)

3. What is your opinion of the educational value of your Mainstreaming experience? In other words, when compared with other classroom situations you went through, did you find the Mainstreamed classroom a better, worse or equivalent way for you to learn the academic substance you were given in high school?

4. What do you recall about your social experiences in these Mainstreamed classrooms?

5. Does this differ from your social experiences in classrooms that were not Mainstreamed? If yes, how?

6. How have Mainstreamed classrooms influenced your vocational experiences since high school? (probe, if necessary: Were they helpful in finding a job? Did they affect the way you relate to non-disabled people which, in turn, might influence your job performance and satisfaction?

7. How have Mainstreamed classrooms influenced your social experiences since high school? (probe, if necessary: Have they affected your ability to make friends? To get along with others on the job?)

8. Looking back on all your Mainstreamed experiences, what stands out for you as the most important benefits, if any, that you received? (probe, if necessary: What did you get out of it educationally or socially that you may not have gotten otherwise?)

9. Are there any aspects about your Mainstreaming experiences that you wish had been different? (probe, if necessary: Would you change anything that you experienced or witnessed in Mainstreamed classrooms?)

The following are a set of brief questions we would like your reactions to. These questions are answered according to the following rating scale:

1 = Agree strongly with the statement
2 = Agree (but not strongly) with the statement
3 = Neither agree nor disagree (or the question simply does not apply to my experiences)
4 = Disagree with the statement
5 = Disagree strongly with the statement.

1. I enjoyed being in the Mainstreamed classrooms I had: _____ (1 - 5)

2. Teachers in these classes gave me the attention I needed (no more, no less): _____ (1 - 5)

   (If not in strong agreement or disagreement, check one:)

   ____ More attention than I needed.
   ____ Less attention than I needed.

3. The Mainstreamed classes I took benefitted me the same as any other classes I took: _____ (1 - 5)

   (If not in strong agreement or disagreement, check one:)

   _____ They benefitted me more (educationally)
   _____ They benefitted me less (educationally)
   _____ They benefitted me more (socially)
   _____ They benefitted me less (socially)

4. I sometimes felt rejected by some of my non-disabled peers in these Mainstreamed classes. _____ (1 - 5)

5. Overall, I think that Mainstreamed classrooms are a good idea for the educational development of:
   Orthopedically disabled students: _____ (1 - 5)
   "Regular", non-disabled students: _____ (1 - 5)

6. Overall I think that Mainstreamed classes are a good idea for the social development of:
   Orthopedically disabled students: _____ (1 - 5)
   "Regular", non-disabled students: _____ (1 - 5)

7. One last question: What do you think the schools can do to help make the Mainstreaming experience a successful one for everyone involved? (probe, if necessary: What additional help, if any, would the people involved need in order to make the Mainstreaming experience a success?)

(Please put your answer on the reverse side of this page.)

Thank you very much for your time and opinions. You will be receiving the $5 honorarium through the mail, shortly.

Sincerely,

WESTSIDE CENTER FOR INDEPENDENT LIVING STAFF

Summarization Categories for the Retrospective Questionnaire

Question

1. a. self initiated
   b. other initiated
   c. had been in MS classes before HS and merely continued
   d. cannot recall
   e. discussion with relevant school personnel

2. a. higher work load
   b. differences in teacher attitudes
   c. peer-related observations
   d. no differences
   e. promoted confidence/independence

3. a. more attention in OH classes (More one-to-one instruction)
   b. richer education in MS classes
   c. more "real life" in MS classes (e.g., competitive)
   d. no differences

4,5, & 7. a. positive social experiences
   b. negative social experiences
   c. improved over time
   d. no difference

6. a. prepared me for real life - taste of reality
   b."toughened" me up
   c. helped develop specific skills
   d. no influence

8. a. added maturity - "grew up"
   b. academic enrishment
   c. given the opportunity to socialize with Non-OH peers
   d. nothing in particular/no answer

9. a. No; no problems encountered
   b. wished Non-OH peers had been more accepting, courteous, concerned, etc.
   c. particular curriculum concerns

10. a. have regular students learn more about limitations of OH
    b. more responsiveness on part of school (practically: e.g., ramps, bathrooms/curriculum: start earlier)
    c. Nothing; would not change anything.